



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



14

37
4

green

Globe Outline Series

HISTORY OF EDUCATION

(Including Recent Trends in Education)

BY

PHILIP R. V. CUROE, Ph.D.

HUNTER COLLEGE, CITY OF NEW YORK

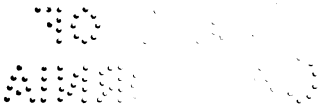


NEW YORK
GLOBE BOOK COMPANY

Digitized by Google

LA14
C8

COPYRIGHT, 1921
GLOBE BOOK COMPANY



PREFACE

THE Outline of the History of Education in Ancient, Medieval, (Part I) and Modern Times (Part II) has been organized to make available a stimulating guide for high school, normal school, and college students of the subject, as well as for teachers desiring a compact summary of the field. Based upon years of classroom teaching of the material in college, normal school, and extension courses for teachers, it is designed to meet the needs of many groups.

Because they have been found helpful to students in the classroom, the following features have been incorporated:

1. **Chronological graphs** to aid in fixing a time perspective for the big movements. This device has been used as a substitute for the interspersing of dates throughout the text.

2. **Lists of questions** at the close of each chapter or topic. These have been given to facilitate self-testing. An inclusive list of such questions has also been appended at the end of each part of the book.

3. **Parallel column arrangement** in some places to bring into prominence significant contrasts and comparisons.

4. A **chronological drill** at the end of Part I for a rapid identification of names and outstanding events.

5. A **false-true test** at the end of Part II to afford exercise in testing educational statements in the light of the facts presented in the body of the Outline.

An acknowledgment is due to hundreds of former students whose reactions to various methods of organizing the subject have evolved the plan here used.

P. R. V. C.

New York City,
January, 1921.

862394

Digitized by Google

CONTENTS

ANCIENT AND MEDIEVAL TIMES

CHAPTER	PAGE
I. Introduction	1
II. Type Oriental Attitudes towards Education.....	4
III. Jewish Education.....	12
IV. Greek Education.....	17
V. Roman Education.....	34
VI. Christian Education During the Apostolic and Patristic Period.....	46
VII. Christian Education During the Monastic Period.....	51
VIII. Christian Education During the Scholastic Period.....	57
IX. Saracenic and Chivalric Education.....	64
X. Educational Situation at the Break-up of the Middle Ages	69

MODERN TIMES

XI. Education During the Renaissance.....	73
XII. Education During the Protestant Revolt and Catholic Reaction.....	87
XIII. The Realistic Movement in Education.....	102
XIV. John Locke (1632-1704), Eclectic	119
XV. Education in America to the Public School Revival.....	123
XVI. The Naturalistic Movement in Education.....	139
XVII. The Psychological Movement in Education.....	148
XVIII. The Scientific Movement in Education.....	165
XIX. The Public School Revival and Subsequent Developments in the United States.....	171
XX. Development of National School Systems in Europe.....	177
False-True Test.....	186
Bibliography	190
Index	205
Recent Trends in Education *	

HISTORY OF EDUCATION

ANCIENT AND MEDIEVAL TIMES

CHAPTER I

INTRODUCTION

I. **Meaning of the Term Education.**—A great variety of definitions have been formulated, but it is helpful to think of them as either objective or normative. Objective definitions attempt to state what education is as a process, normative definitions attempt to state what that process should aim at. It follows that the normative definition of education will depend on the aims (ideals, norms, standards) prevailing at a given time or place. The Spartan held different aims from the medieval monk, and the monk from the twentieth century American. Hence the normative definition of education of the three would differ accordingly.

A. **Example of an Objective Definition.**—"Education ✓
is the resultant on the individual of the sum total ✓
of the influences of life." This would include all influences save those covered by the term heredity.
Second Example of an Objective Definition.—"Education is the influence on the individual of the school, so-called." This is much narrower than the preceding, since it eliminates such influences as the theatre, family, church, etc. It is the influence of the school, so-called (*i.e.*, the institution set apart to mould the immature members of society) which constitutes education.

B. Example of a Normative Definition.—"Education is a preparation for eternal happiness with God."

Here beatitude after death is the paramount aim or ideal; education is defined accordingly. The history of educational theory and practice presents a rapidly shifting series of normative definitions, paralleling the rapidly shifting ideals or norms of different times and places. But in spite of the differences among these statements of what education should aim at, it is possible to formulate a normative definition which will include them all, as follows:

C. A Working Normative Definition of Education.—

"Education is the means by which peoples have attempted to realize their ideals." ("An ideal is an idea pursued."—Horne.)

D. Relation Between the Two Types of Definition.—

The normative definition states the aim, the means by which peoples have attempted to realize their ideals; the objective definition states the process, through the influence on the individual of the school, so-called. The implications of this definition are:

1. The study of the education of a people must take cognizance of the background of social, political, religious, and other ideals of that people, since education is an attempt to realize these. For example, the education in Prussia before the World War would be unintelligible without a knowledge of the ideals crystallized in the word "kultur."
2. The study of education must draw back the curtain and discover what institutions other than the school are contributing to the life of the people under consideration. For example, to properly evaluate the work of the school in ancient Athens, its work must be studied in the perspec-

tive created by its relations to the free theatre, the democratic assembly, the Olympic games, and the popular juries.

3. The study of the history of education must be broader than itself ; it has been called "the history of civilization."

II. The Perennial Problem of Education.—Since education influences the *individual*, and since it attempts to realize the ideals of *society*, there arises the unceasing problem, the harmonizing of individual development with social demands. The study of the history of education will be illuminated and unified if the panorama of theories and practices as it passes in review is thought of in relation to this problem. In general, two attitudes towards the problem can be recognized among early peoples:

- A. Attitude of **Oriental Countries** Towards the Problem.—Here education is for the perpetuation of existing standards, not for individual development. India, Egypt, China, and Persia are good types of this attitude. The Jews mark a transition to the—
- B. Attitude of **Occidental Countries** Towards the Problem.—Here there is recognition in varying degrees of individual development, and an attempt to balance the two sides of the problem. Sparta, Athens, and Rome are the types usually selected for study.

CHAPTER II

TYPE ORIENTAL ATTITUDES TOWARDS
EDUCATION

- I. Basis of Selection.—Historically the most important racial groups are Aryan, Hamitic, Turanian, and Semitic. Educationally the most important representatives among the early peoples of these racial groups are (1) of the Aryan, Hindus and Persians, (2) of the Hamitic, Egyptians, (3) of the Turanian, Chinese, (4) of the Semitic, Jews.
- II. Hindu, Egyptian, Chinese, and Persian education can be considered under three heads:
 - A. **View of Life.**—This will give an insight into the ideals which education attempted to realize among these peoples.
 - B. **Social Classes.**—This will indicate the kinds of people to whom educational opportunities were offered.
 - C. **Attitude Towards Change.**—This will place these systems with reference to the perennial problem of individual development *vs.* conformity to social standards.
- III. **View of Life.**
 - A. **Hindus.**—The peninsula was settled about 2000 years before the Christian era by an Aryan people. Some determining influences were:
 - i. Enervating, debilitating climate; rich and fertile valleys made it possible to get a living without proportionate labor. Hence (a) little natural science developed, and (b) a powerful soldier class arose to defend the country against aggression.

2. Great climatic vicissitudes beyond human control, leaving suffering and misery in their wake. Hence fatalism; the world an illusion, Brahma, the World Spirit, alone is real; end of existence loss of personality and fusion with Brahma. Some practical corollaries were (a) growth of a body of sacred literature, the Vedas, (b) growth of a leisure class, the Brahmins, who constituted the priestly and ruling class, (c) another religion, not conducive to idleness, worked out for the masses; an idolatrous polytheism—worship of particles thrown off from Brahma (Vishnu), (d) Brahmin class had strong motive for controlling teaching function, (e) and in suppressing democratic movements, *e.g.*, that under Buddha.

B. Egyptians.—Some determining influences were:

1. Annual inundations of the Nile; Egypt "the granary of the world." Hence (a) natural science developed to solve problems created by the Nile, and (b) powerful soldier class to defend country against aggression.
2. Belief in personal immortality *vs.* Brahminism; belief that the double (ka, soul) wandered in search of the body after death. Hence (a) statues and pyramids to house the ka religiously inspired, (b) embalming to preserve the body for the return of the ka, (c) propitiation of natural forces on which economic welfare depended (Nile, sun, etc.), (d) development of sacred literature around this religious conception, (e) building inspired by religious motive, embalming, custody of the sacred literature, under control of religious class; Egypt a theocracy.

C. Chinese.—Some determining influences were:

1. An economically self-sufficient country protected by topographical conditions from outside attack. Hence (*a*) not subject to changes which result from contact with other civilizations, (*b*) no powerful soldier class developed, vs. India and Egypt.
2. Work of Confucius, a provincial prefect (c. 500 B.C.), in codifying the old standards and customs. Hence (*a*) this compilation, the Five Classics and the Four Books, became the guide to conduct, the Chinese Bible, (*b*) thorough familiarity with it was a prerequisite to official positions.
3. Worship of ancestors. Hence (*a*) the head of the family discharged the sacerdotal functions and no powerful priest class developed, vs. India and Egypt.

D. Persians.—Some determining influences were:

1. Bracing climate and relatively barren country. Hence (*a*) aggressive characteristics of the Aryan race not lost as in India, (*b*) as population increased, there was a need for predatory raids on neighboring countries, and so a motive for conquest and world empire, (*c*) importance of the soldier.
2. Persian life a struggle, both in an economic and a military sense; this reflected itself in Persian philosophy. Hence (*a*) life a dualism; Ormuzd the god of good vs. Ahriman the god of evil; Ormuzd became identified with the sun and fire, (*b*) priest class, the Magi, arose, and had duties connected with the sacred fires, (*c*) the struggle individual as well as cosmic; there

was a moral element in Persian philosophy vs. the bargaining with the gods in Egypt.

IV. Social Classes.

A. **Hindus.**—In India there was a rigid caste system; accident of birth determined political, social, and educational opportunities; caste could be lost by marriage into a lower caste, but caste could not be gained. The social classes with their educational opportunities were:

1. Brahmins (priests, teachers, rulers). Education received from Brahmin teachers in parishads or colleges, the chief content being the sacred literature (Vedas).
2. Soldiers. Education received was vocational, bearing directly on a career in the army; in modern times education in three R's and religious observances suitable for the caste in elementary schools; members of this caste sometimes admitted to parishads.
3. Merchants (employers of labor). The home the chief educational institution; in modern times education in three R's and in religious observances suitable for this caste in elementary schools.
4. Sudras (laboring class). No education at all; as in Greece, the upper classes in India rested upon the backs of a large submerged population.

B. **Egyptians.**—In Egypt there was a partial caste system; opportunities to enter vocations other than those of one's father existed. The social classes with their educational opportunities were:

1. Sacerdotal Class (priests, teachers, administrators). Education in the Temple colleges stressed practical or vocational content (religious literature, ceremonial, etc.).

2. **Soldiers.** Elementary education in private schools, military training in the army. Special training at the Temple colleges was open to those of marked ability (scribe, architect, physician, singer, etc.).
 3. **Industrial Class** (those not included in the other classes). Education of an elementary kind in private schools, vocational preparation by apprenticeship. As in the case of the soldier class, higher training was theoretically open to those of unusual ability; in practice it was not often taken advantage of.
- C. **Chinese.**—In China there was no caste system; conditions did not lead to the development of either a priestly or a military class. Theoretically, the private schools and the public examinations were open to the males of all classes; practically, since schools were private and since preparation for examinations necessitated much leisure, many were shut out from both. The two outstanding features of Chinese education were:
1. **Schools**, chiefly elementary, but a few academies for higher training. All private and concerned with teaching the exceedingly difficult literary language and the sacred books.
 2. **Examinations.** There were three chief examinations: the first at the county seat, the second at the provincial capital, the third at Peking. A degree, distinctions, privileges, and vocational opportunities were bestowed upon the successful candidates in each. These examinations tested memory of the sacred books and ability to write literary Chinese.
- D. **Persians.**—In Persia there was no real caste system. With the exception of the royalty and he-

editary priesthood, class distinctions were in terms of wealth, not of blood. The chief educational features were:

1. Systematic higher education for the hereditary Magi, stressing the sacred literature (Zend-Avesta).
2. Special military training, probably under state control, for aristocratic boys.
3. Apprenticeship the chief means of preparing lower class boys and girls for practical life.
4. The family was the chief school for all classes; morality, especially truth-telling, emphasized.

V. Attitude Towards Change.

A. In India, Egypt, and China, the attitude was one of hostility.

1. In *India*, the Brahmins (rulers, teachers, priests) jealously guarded against innovations which might call into question their special privileges and class prerogatives.
2. In *Egypt*, the practical demands of peculiar topography and of religion forced some changes in surveying, engineering, architecture, and the decorative arts—and education took notice of these changes. But progress took place only to the point of satisfying practical and religious demands, then stopped. Further development along these lines in Egypt—knowledge for its own sake and art for beauty—awaited the versatile hand of the Greek at Alexandria.
3. In *China*, “those were chosen to rule in the present who were best able to conserve the past.” There was no individual development beyond catching up with the customs, language, standards, etc., of the past.

B. In *Persia*, the attitude towards change was more

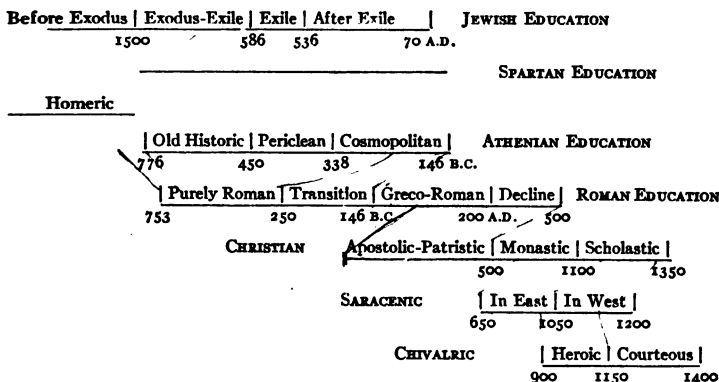
friendly. Contact with other peoples, the growth of a heterogeneous empire, forced a more liberal attitude. But Persia gave way to the vigorous Macedonians. "Persia, which might have proven the first type of Aryan progress, was forced to hand over the torch to the Athenian Greeks."—Graves.

- VI. Significance of the Date 500 B.C. in Connection with the Educational History of India, Egypt, China, and Persia.
- A. **India.**—Buddhism, the democratic revolt against the Brahmin view of life arose about 500 B.C.
 - B. **Egypt.**—Conquest by the Persians, which brought to an end the distinctive civilization on which the educational system described was based, took place about 500 B.C.
 - C. **China.**—Confucius was collecting and writing the Five Books and the Four Classics which were so to influence Chinese education; about 500 B.C.
 - D. **Persia.**—Formulation of the religious conception of a struggle between Ormuzd and Ahriman, which colored Persian life and education, about 500 B.C.

QUESTIONS

- (1) Show how national ideals influenced education among (a) the Hindus, (b) the Chinese, (c) the Jews.
- (2) Show how a knowledge of the history of oriental education may be of value to the modern teacher.
- (3) Describe the native system of education that has prevailed in India or in China and show how this system is responsible for the conditions that have so long existed.
- (4) Why does a knowledge of the ideals and practices of a nation aid the students in understanding its educational system? Give an illustration.
- (5) To what extent was there state control of education in India, Egypt, China, Persia?

CHRONOLOGICAL GRAPH OF EDUCATIONAL HISTORY TO THE RENAISSANCE PERIOD



Note on Chronological Graph.—This graph is designed to aid the student in visualizing the major periods of educational history before the Renaissance and in avoiding glaring anachronisms. Some of the delimiting dates are of necessity arbitrary and must not be taken too literally. For example:

- A. The date 146 B.C. is given for the close of Athenian education. This is not to be interpreted as meaning that Athenian influence in education came to an abrupt end; Athenian influence continued to play an important part, but through Roman forms and institutions. The date signifies the conquest of the Greek city-states by Rome and their annexation as a province of the Empire.
- B. The date 1100 A.D. is given as marking the close of the Monastic Period. Obviously this is not to be taken literally, for monastic schools have continued in existence to the present time and the monastic ideal found expression later in the work of the Jesuits, Dominicans, Franciscans, Christian

Brothers, and numerous other educational groups. The date signifies the beginning of a movement in Christian scholarship which placed emphasis on elements not stressed in the six preceding centuries, the Scholastic Movement.

CHAPTER III

JEWISH EDUCATION

- I. Chronological Graph.—The main time divisions of Jewish education may be represented as follows:

Before Exodus	Exodus to Exile	Exile	After Exile
c. 2300 B.C.	c. 1500 B.C.	586	536
			70 A.D.

- II. Chief Contributions of the Jews to Civilization.—These were:

- A. A monotheistic religion, differing from that of the Brahmins (1) in that religion was closely connected with conduct, and (2) in that Jehovah was the God of all the Jewish people, not of a special class.
- B. A basic code of ethics, the decalogue.
- C. The most influential contribution to world literature, the Bible.
- D. The conception that education should be for all, regardless of class status; this not only recognized in theory, but put into practice.

- III. Jewish Education before the Exodus.—The period from Abraham, under whose leadership the Hebrews migrated from the east side of the Euphrates into Canaan (Palestine), including the wandering into Egypt and the sojourn there, and closing with the deliverance from Egypt under Moses.

- A. The *aim* of education was religious, moral, and vocational.
- B. The *organization* was in terms of the family; the father was priest, teacher, and ruler (patriarchal stage of development); the mother shared the burden of instruction, especially of the girl.
- C. The *content* does not seem to have included the formal studies, reading, writing, and counting; these were added after the Exile.

IV. Jewish Education from the Exodus to the Exile.—

The period beginning with the deliverance from Egypt under Moses, including the nomadic life in the Sinaitic Peninsula, and the return to Canaan. Economically, the Jews passed through the pastoral into the agricultural stage. Politically, they passed through the tribal into the national stage, first through the rise of the judges, then of the kings beginning with Saul. During this period the kingdom divided into two parts, Israel and Judah; Israel was conquered by the Assyrians (hence the "ten lost tribes"), Judah by the Babylonians.

- A. Period of Nationalization.—Three great forces were operative during the period to weld the Jews into a nation: (1) the Temple, where all male Jews were under obligation to attend three times yearly (Passover, Pentecost, Tabernacles), to commemorate Jehovah's goodness to the Jews, (2) the Prophets, who arose in times of moral and religious backsliding, and who were both patriotic and religious revivalists, (3) the presence of a common enemy (the Philistines).
- B. The *aim* of education was religious, moral, and vocational.
- C. The *organization* was still in terms of the family as school. But (1) training for the priests (who

had taken over the religious functions from the father at the Exodus) and for the scribes was now necessary, and (2) preparation for their work was needed by the lay prophets, which led to the so-called "schools of the prophets."

- D. The *content* was the history of the Jewish people and of Jehovah's dealings with them, the explanation of the feasts as they recurred, the Jewish law as found in the Pentateuch, the psalms and the proverbs. The vocational element consisted of a trade for the boy and training in homemaking for the girl. The formal elements were not generally taught. But (1) priests and scribes made a more systematic study of Jewish history and law, and (2) prophets studied Jewish law, sacred music, and poetry.

V. **Period of the Exile.**—During the Captivity in Babylon, the Jews learned three lessons which profoundly influenced them upon their return to Canaan. These were:

- A. The significance of a rigid observance of the Law (Torah, Pentateuch). The Temple had been destroyed at the Exile; it was the Law which served as a unifying force while the Jews were in captivity.
- B. The danger to national strength and solidarity of falling away from lofty standards of morality and religion; this had led to their own downfall, it was exemplified again in the collapse of Babylon before Persia.
- C. The existence of a teaching institution outside the home, with a special class discharging the function of teacher.

VI. **Jewish Education after the Exile.**—The period beginning with the return from Babylon, including the

Persian protectorate, the rule of the Ptolemies and of Syria, the short-lived independent religious state under the Maccabees, and closing with Roman rule and the destruction of the second Temple by Titus.

A. Growth of a New Teaching Class.—The Scribes

(Sopherim, Scripture Scholars, later Rabbins), whose duties had been clerical before the Exile, became the authorities in matters relating to the Law. Their position in Post-exilic education was:

1. They made a systematic study of the Jewish Torah (now reduced to writing), in institutions called *synagogues*.

2. They expounded this Torah to the people at the synagogues on the Sabbath.

3. They exercised judicial functions in cases arising under the Torah.

4. Their decisions and their commentaries upon the Torah, later collected and reduced to writing, constitute the Talmud.

5. They were trained for their work at a college (Beth ham-Midrash, House of Instruction) where they studied under scribes of established reputation. This higher course stressed the analytic study of the Torah, of its interpretation, and foreign languages, particularly Greek.

6. They were the teachers in the elementary schools for the people when these were established.

B. Growth of Elementary Schools.—These began as voluntary in the second century before Christ, became compulsory in Jerusalem in 75 B.C., and then in every province and town in 64 A.D. by decree of Joshua ben Gemala, High Priest.

1. The *aim* in these schools was moral and religious, the vocational aim still being vested in the father.

2. The *organization* was in terms of the synagogue for males, but the home for females. Some notable features were (a) compulsory attendance, (b) rich and poor studied together, (c) no teacher was to have under his tutelage more than twenty-five pupils, (d) strict qualifications for teachers; they must be married, mature, able, (e) work was divided into two parts on the basis of age, from 6 to 10, and from 10 to 15.
3. The *content* for the 6 to 10 period consisted of reading, writing, and simple arithmetic (cumbersome notational system prevented advanced work); the Pentateuch was the chief reading text. The content for the 10 to 15 period consisted of reading and explanation of the Mishna (first part of the Talmud). Content beyond the age of 15, if education were continued, was the Gemara (second part of the Talmud).
4. The *method* stressed oral teaching and dictation with large appeal to the memory. Talmud is replete with suggestions bearing on pedagogy (recognition of individual differences, appeal to various memories at time of teaching to insure better retention, use of mnemonic devices).
5. The *discipline* recognized corporal punishment as valid both in dealing with refractory conduct and with backwardness in lessons. It also included a strong appeal to emulation (rewards and prizes).

VII. Jewish Education after the Dispersion (after 70 A.D.).—The Jews founded elementary schools wherever they went, and in our own times, where public elementary schools fail to include their Law, their

language, and their history, some Jews will be found sending their children to schools under their own auspices which do. These schools may be Sabbath schools, all-day schools, or late afternoon schools, *e.g.*, Talmud-Torahs.

QUESTIONS

(1) Show how national ideals influenced education among (a) the Hindus, (b) the Chinese, (c) the Jews.

(2) What was the main purpose of education among the Hebrews? What was the attitude of these people toward industrial or practical education?

(3) Describe the system of education that existed in some Oriental country, touching on aims, methods and results.

(4) Describe the early Jewish education, touching on aims, subjects taught and influence on the home.

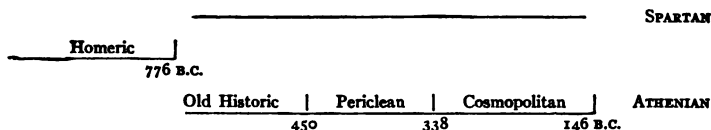
(5) Compare Jewish education before the Exile with Jewish education after the Exile.

(6) Show the influence of the following in Jewish educational history: Joshua ben Gamala, the prophets, the scribes, the Exile.

CHAPTER IV

GREEK EDUCATION

I. Chronological Graph.—The main time divisions of Greek Education may be represented as follows:



II. Chief Contributions of the Greeks (chiefly Athenians) to Civilization.—These were: Digitized by Google

- A. Art—individual masterpieces in sculpture and architecture; standards and forms upon which later art has been based (*e.g.*, three orders of architecture).
 - B. Literature—an important contribution to world literature (Homer); models, freely imitated in other literatures, of many types of literary composition.
 - C. Philosophy—specific systems destined to play a large part in the thought life of the world (Platonic, Aristotelian, Stoic, etc.); the formulation of some eternal philosophical problems, such as relation between changing and changeless worlds, etc.
 - D. Science—many of the specific beliefs of the Greeks have long since been superseded, but they are the earliest representatives of the scientific attitude of mind, of the spirit of research and investigation; contributions of permanent value in mathematics (Euclid) and physics (Archimedes); formulation of the laws of thought (Aristotle's *Organon*).
 - E. Political Theory and Practice—earliest attempts to inquire into the constitution of an ideal society; political democracy achieved in practice, but the Greeks never attained to social democracy; their city-states rested upon a large submerged disfranchised population.
- III. **Historic Divisions of Greek Education.**—As noted in the graph on p. 17, the two Greek states usually selected for study are Sparta and Athens, Sparta as the best example of the Dorian branch of the Hellenic family, Athens of the Ionian branch.
- A. Homeric Period (to 776 B.C.)—common to all the Greeks.
 - B. Sparta—no important time divisions.
 - C. Athens—three periods may be distinguished:

1. Old Historic Period—from the first Olympiad to the close of the Persian Wars.
2. Periclean Age—from the close of the Persian Wars to the Macedonian conquest.
3. Cosmopolitan Period—from the Macedonian conquest to the burning of Corinth, when Athens and the other city-states were annexed to Rome as a province (Achaia). But, since "captive Greece took captive her rude conqueror," Greek influence worked through Roman forms and institutions well after 146 B.C.

IV. Greek Education During the Homeric Period.—

Chief sources of information are the Iliad and Odyssey of Homer. ✓

- A. The *aim* of education was practical and contained two elements, (1) the man of wisdom (Ulysses the type), and (2) the man of courageous action (Achilles the type). Each of these aims was to be tempered to avoid one-sidedness, courage by reverence for the gods, wisdom by wholemindedness (control of desires and passions by reason).
- B. The *organization* for educational purposes was to be found in the family, the tribe, and the council.

V. Spartan Education Compared with Athenian Education of the Old Historic Period.

A. Aim of Education.

1. **In Sparta**—individual excellence for state usefulness, where individual excellence meant military excellence and public usefulness meant usefulness in time of war.
2. **In Athens**—individual excellence for state usefulness, where individual excellence meant fully rounded development (physical and intellectual) and public usefulness meant usefulness in war, but also ability to take an active part in

the rich institutional life of the city-state in time of peace.

B. Organization of Education.

1. **In Sparta**—formulated in constitution of Lycurgus, ninth century B.C. Salient features were: (a) complete state control from birth to death, (b) state council decided at birth whether child should be permitted to live, (c) education from birth to 7 in home under mother's care, (d) education from 7 to 18 in public barracks under older boys and state official, *pedonomus*, (e) education from 18 to 20 in same barracks as a captain over younger boys, (f) at 20 the oath of loyalty to Sparta was taken, (g) from 20 to 30 army training, actual warfare or mimic warfare (when Sparta was at peace), (h) at 30 citizenship, seat in public assembly, obligation to attend public barracks and to act as mentor to a younger boy.
2. **In Athens**.—Salient features were (a) much left to individual responsibility; certain stages of education private, (b) father had power to decide at birth whether child should be permitted to live, (c) education from birth to 7 in home, usually under a slave nurse, (d) education from 7 to 16 divided between two private schools, *palestra* and music school; boy in constant company of slave attendant, *pedagogus*, (e) education from 16 to 18 divided between attendance at a public school, the gymnasium, and informal civic training through presence at assembly, courts, etc., (f) at 18 the oath of loyalty to Athens was taken, (g) from 18 to 20 compulsory army training, the first year in Athens, the second on the frontier, (h) at 20

citizenship, assumption of definite duties in the assembly, on the popular juries, etc.

C. Content of Education.

1. In Sparta.—(a) *physical* element predominant; aimed at hardening the body and development of capacity to endure pain; running, jumping, wrestling, pancratium (any means of overcoming one's opponent valid), dancing in full armor (not for esthetic but for religious and patriotic purposes), (b) *moral element* aimed at traits conducive to successful soldiering; self-dependence in that Spartan boy was given insufficient food and compelled to forage for more; respect for elders; questions at the public mess table on civic and moral issues; intense patriotism through imitation of examples, (c) *intellectual* element slight; Laws of Lycurgus and selections from Homer chanted to Doric measure; drill in speaking to the point and without verbosity (hence "laconic reply"); reading and writing not usually taught.
2. In Athens.—(a) *physical* element carefully organized in palestra; bodily grace and harmony the aim; hence careful selection and gradation of exercises (*pentathlon*); in gymnasium, exercises more difficult and pre-military; disfigurement guarded against (hence pancratium rarely used); (b) *moral* element from Homer, the Greek Bible; service to city-state stressed; not as careful of this element as Jews, Spartans, or Romans (*e.g.*, entrusting boy to ignorant slave attendant); during period from 16 to 18 informal civic training through contact with elders, attendance at assembly, juries, etc.; (c) *intellectual* element provided in music school;

reading, writing, and counting a regular part of the work; Homer read, passages memorized and chanted; music proper (seven-stringed lyre) taught as sister art to poetry and accompaniments to be improvised by older boys to go with chanting of poetry; dancing for esthetic purposes.

D. Method of Education.

1. **In Sparta**—training rather than instruction; education through participation in activities with older boys and grown citizens as mentors; non-bookish; periodic examinations, but not to test memory; rather to test habits and capacities (*e.g.*, whippings before altar of Artemis Orthia to test ability to endure pain.)
2. **In Athens**—training rather than instruction; poetry through chanting of selections, music through actual playing and with older boys actual improvisation; civics not from books, but through attendance at places where civic activities were in progress; absence of written examinations; examining of skills and capacities.

E. Discipline in Greek Education.

1. **In Sparta**—infliction of pain on the body (corporal punishment) both (*a*) for moral breaches and (*b*) for mental inalertness; boys whose answers were verbose had the thumb bitten by the boy captain; grown citizen expected to punish the boy found acting improperly; fear of public disapproval appealed to (athletic contests under the eyes of the citizens); emulation extensively used.
2. **In Athens**—infliction of pain on the body; pedagogue had power of using it with his

charge; classes small yet in the 7 to 16 period the personal bond of affection between teacher and pupil could not have been an important disciplinary factor since these private teachers were held in low esteem (cf. scribes in Jewish education); state official, *sophronist*, supervised the boys' conduct during the 16 to 18 period; serious infractions of moral conduct dealt with by the Court of the Areopagus; emulation much appealed to.

F. Attitude Towards the Education of Women.—The above analysis applies to male education. With respect to female education, the two systems compared as follows:

1. **In Sparta**—the home was the school; there was no institution for girls corresponding to the public barracks for boys; aimed to develop mothers of sturdy and patriotic sons; the whole range of physical exercises was engaged in (even wrestling); singing and dancing were included for religious and patriotic purposes.
2. **In Athens**—education of women neglected; upbringing of children entrusted to slave nurses (often Spartan women in the later period); household duties to be learned by pick-up methods; cultured women (the *hetærae*) were not in good standing, were not home women.

QUESTIONS

(1) Make three favorable criticisms and one unfavorable criticism on Athenian education.

(2) Give three prominent characteristics of Athenian education.

(3) Show in what essentials the education of the Athenians was superior to that of the Orientals.

(4) Compare education in Athens with that in Sparta as regards (a) control exercised by the state, (b) results secured.

(5) Describe Spartan education as to aim, organization and content.

(6) Gymnastics and music were the principal subjects in the education of Athenian children. State the scope and the purpose of each of these subjects.

VI. Athenian Education During the Periclean Age.—

The age of Pericles in the strict sense of the term was from 459 to 431 B.C. But from the educational standpoint, it is more helpful to consider the period from the close of the Persian Wars (c. 480 B.C.) to the Macedonian conquest (338 B.C.) as a unit. This period is sometimes called the Periclean Age and sometimes the Period of Transition.

A. General Character of the Period.—After the successful conflict of the Greek city-states with Persia, to which Athens had been the chief contributor, important changes set in; these were of a political, social, economic, religious, and moral nature. Athens became the center of Greek life, the head of the Confederacy of Delos. New opportunities for personal aggrandizement opened up to the young men of the city. Stress on personal advancement as the goal of education was accompanied by a weakening of the old conception of service to the state. In the conflict of ideals which resulted, three groups of thinkers may be recognized, (1) the Sophists, (2) the Reactionaries, (3) the Mediators.

B. The Sophists.—These were the teachers who came to Athens to meet the demand for a new education in keeping with the changed conditions.

1. General Position.—Old standards of political and social life have lost their holding power through contact with outside influences; the individual must fall back upon himself and make

his own adjustments. "Man (*i.e.*, the individual) is the measure of all things."

2. Personnel.—The Sophists were colonial Greeks (therefore foreigners in the eyes of the old conservative Athenians); they had traveled widely and were familiar with conditions outside of Athens; there were among them some genuine scholars, but also some charlatans who were attracted to Athens by the prospect of financial gain and who brought discredit upon the name "sophist." Some of the great sophists were (*a*) Protagoras, who emphasized especially grammar, of which, for the Greek, he was the originator, (*b*) Prodicus, renowned for his fine distinctions in word usage, and (*c*) Gorgias, a skeptic in philosophy, who must have added force to the attack on universal, binding standards in morals, religion, and politics.
3. Reception.—Opposed by the reactionary group because (*a*) they were foreigners, (*b*) they accepted pay for teaching, (*c*) their name was presumptuous, "wise men," (*d*) their teaching aimed to prepare for personal advancement rather than for service to the state. Welcomed by the youth of the city who flocked to their lectures.
4. Teaching.—The aim of their teaching was two-fold, (*a*) moral, in that they encouraged their students to work out their own adjustments to the "mores" (group customs), (*b*) vocational, in that they strove to train public speakers at a time when ability to speak convincingly was the open sesame to political preferment. The organization of sophistic education was in terms of meetings between the sophist and

those who paid to hear him; no school buildings eventuated from the movement. The **content** was varied, but grammar and rhetoric as aids to forceful speaking were stressed. The **method** was that of the lecture.

C. The Reactionaries.—These were the patriots who tried to stem the tide of individualism which was setting in in Athens.

1. **General Position.**—Return to the old ideal of service to the city-state; the individual must be sunk in the citizen.

2. **Personnel.**—(a) Pythagoras, who formed a brotherhood at Crotona (Italy) where interdependence and social co-operation were stressed, (b) Aristophanes, who held the sophists (with whom he identified Socrates) up to ridicule in his comedies, *e.g.*, *The Clouds*, (c) Xenophon, who brought to the attention of his fellow Athenians in the *Cyropedia* the Spartan ideal of state service.

D. The Mediators.—These were the philosophers, Socrates, Plato, and Aristotle, whose educational position may be stated thus: conditions have changed so that the old ideals and the old education are no longer adequate, but the individualistic position of the sophists will not suffice; a new basis of morality and education must be worked out.

E. Socrates (469-399 B.C.), first of the Mediators.—A native Athenian, regarded with suspicion by both Sophists and Reactionaries; ultimately condemned to death by an Athenian jury. Socrates wrote nothing; his educational ideas have come down in the writings of his pupils, Plato and Xenophon.

1. **Socrates' General Position.**—Rejected the dic-

tum of Protagoras that "man (*i.e.*, the individual) is the measure of all things." There are concepts (whole-thoughts) on which all men are in fundamental agreement—such concepts as piety, temperance, justice, courage. All men can grasp and understand these concepts. This knowledge is virtue.

2. Socrates' Aim in Teaching.—This may be conceived as two-fold, (*a*) to arrive at these fundamental concepts, (*b*) to develop the power to think.
3. Socrates' Method.—His method was conversational (quiz, elenchus) and had two parts, (*a*) the ironic or destructive part proceeding by questioning the pupil to bring him from unconscious ignorance to conscious ignorance, (*b*) the maieutic or constructive part in which by further questioning the pupil is led from conscious ignorance to truth. As a teaching device this method may be appraised as follows:
 - a.* As a provocative to thought it has obvious advantages over a lecture or telling method. Socrates opposed the lecture method of the Sophists because it gave ready-made opinions, and did not lead to fundamental whole-thoughts.
 - b.* As a method of teaching content subjects, like natural sciences, it falls short since the pupil cannot give what he does not know. But Socrates was not concerned with such subject-matter; ethics was for him the knowledge of most worth.
 - c.* There is in it a valuable suggestion for the teacher who is tempted to abandon the pupil whose answer is incorrect or only partially

correct. It is good pedagogy to "stay with" such a pupil until, through answers to adroit questions he discovers his error and then, through answers to further questions, corrects it.

- d.* It focuses attention upon the difficult art of questioning, which is not merely a means of testing knowledge but a means of inducing mental activity.
- e.* It brings teacher and taught into more intimate relations with one another.

F. Plato (427-347 B.C.), second of the Mediators.—A native Athenian, pupil of Socrates, founder of a philosophical school (the Academy), author of numerous writings in dialogue form with Socrates as interlocutor (save the Laws). Educational contribution found chiefly in the Republic.

- 1. Plato's General Position.**—There is knowledge of universal validity; man (*i.e.*, the individual) is not the measure of all things. This knowledge consists of supersensuous ideas after which phenomenal existences are patterned. All men cannot grasp these abstract ideas; many share but faintly in them by virtue of pre-existence. In the ideal state, men and women should be doing the kind of work for which by nature they are best fitted. The rulers in such a state would be those with the greatest intellectual capacity.
- 2. Plato's Educational Aim.**—This may be considered as two-fold, (*a*) virtue in the individual, (*b*) justice in the state. Virtue in the individual is achieved when the three parts of man's nature, appetites, passions, intellect, are developed harmoniously; justice in the state when

those best fitted to serve as artisans are serving as artisans, those best fitted to serve as soldiers are serving as soldiers, those best fitted to serve as governors (political officials) are serving as governors.

3. Plato's Educational Organization.—The important features were (a) rigid state control as in Sparta, (b) slave population excluded from all educational opportunities, (c) women to receive same training as men (even training for the army), (d) home abolished; children considered the property of the state, (e) age divisions: birth to 7 years, 7 to 16 years, 16 to 20 years, 20 to 30 years, 30 to 35 years, (f) principle of elimination from the educational system at different levels: at 16 years, those best fitted to be artisans eliminated; at 20 years, those best fitted to be soldiers; at 30 years, those best fitted to be minor office-holders; at 35 years, those best fitted for responsible political offices, (g) a life higher than that of civic participation—the life of study and contemplation.

4. Plato's Educational Content.—In the lower stages of education the prevailing Athenian content, music, gymnastics, and military training. For the more advanced stage the four subjects which during the Middle Ages came to be known as the *quadrivium*—arithmetic, astronomy, geometry, music. For the highest stage the study of philosophy.

G. Aristotle (386-322 B.C.), third of the Mediators.—Not a native Athenian, pupil of Plato, teacher of Alexander the Great, founder of a philosophical school (the Lyceum), voluminous writer on a wide

range of subjects. Educational ideas found chiefly in the Ethics and in the Politics.

1. Aristotle's General Position.—Virtue does not consist in knowledge, but in discharging the highest function for which an object is created. For man, this highest function is to be rational in thought and conduct; for the state this highest function is politics, *i.e.*, “the art of so directing society as to make for the greatest good of mankind.”
2. Aristotle's Educational Aim.—To so develop the three phases of man's nature (body, irrational soul, rational soul) as to make for rational living (well-being and well-doing).
3. Aristotle's Educational Organization.—The important features were (*a*) rigid state control; all stages of education public, (*b*) slave population excluded from all educational opportunities, (*c*) typical Greek attitude towards female education, (*d*) home an important institution; training in good habits to be begun there, (*e*) age divisions: birth to 7 years, 7 to puberty, puberty to 21 years, (*f*) a life higher than that of civic participation—the life of study and contemplation.
4. Aristotle's Educational Content.—In the lower stages the formation of physical and moral habits; relegating the child to ignorant slave attendants condemned. In the higher stages training of the irrational soul through gymnastics and music (to the content of which he would add drawing). For the period after puberty civic training and the development of the rational faculty, probably through mathematics, logic and the sciences; the Politics breaks off be-

fore the content of this period has been discussed.

H. Results of the Conflict of Sophists, Reactionaries, and Mediators.

1. On the Higher Stages of Athenian Education.—Sophist movement provided the first higher intellectual education Athens had known. Grammar, rhetoric, oratory, information on a wide range of subjects received increasing attention; physical exercises looking to army service and civic training through attendance at assembly, juries, theatre, etc., received less.
2. On the Lower Stages of Athenian Education.—Conception of education for state service began to give way to the conception of education for self-culture and personal enjoyment (new instruments added in music, wider range of poets read, physical exercises made easier, etc.).
3. Influence of the Mediators.—(a) on their own times—their insistence upon standards transcending individual opinion unable to stem tide of individualism; philosophical schools of Plato and Aristotle contributed to rise of universities; (b) on later times—lasting influence on thought life of the world through many attempts to amalgamate Greek philosophy with other thought systems; in the case of Aristotle, a tremendous influence on the medieval thinkers, especially when he became the chief authority in the medieval universities.

QUESTIONS

- (1) Explain the Socratic method and show its value.
- (2) Describe the Sophists and their work. In what respects did Socrates differ from them?
- (3) Mention two particulars in which Plato and Aristotle agree with modern educators.

VII. Athenian Education During the Cosmopolitan Period.—The period from the Macedonian conquest (338 B.C.) to the burning of Corinth and the conquest by Rome (146 B.C.). After 146 B.C., Greek educational influence continued to find expression, but through Roman forms.

A. General Character of the Period.—The struggle which had been waged during the Periclean Age between the ideals of individualism and state service had resulted in victory for the former. This was evidenced (1) in new tendency in philosophy (*e.g.*, Epicureanism, Stoicism) to seek happiness apart from participation in civic affairs, and (2) in neglect of training for a citizen army; military service first reduced from two years to one, then made optional.

B. Two Chief Educational Events of the Period.—First, the spread of Athenian culture to other peoples; second, the development of a new type of higher education, the Greek university.

1. Spread of Athenian Culture.—Showed itself first in architecture (gymnasias, baths, theatres); later in attempts to amalgamate other systems of thought with the Greek (usually with the Platonic), *e.g.*, (a) work of Philo the Jew in trying to reconcile the Scriptures with Greek thought, (b) heresies like Gnosticism arose from efforts to syncretize Christianity and Greek

philosophy, (c) Greek language, literature, and Stoic philosophy taken over by Romans and studied in Roman schools.

2. **Development of Greek Universities.**—These institutions arose at Rhodes, Pergamon, Tarsus, Athens, Alexandria, and other places. The two most famous were those at Athens and Alexandria. They may be compared as follows:

ORIGIN

ATHENS

Sophist aim had been two-fold, moral and vocational. The first aim set the problem out of which grew the Philosophical Schools (Platonic, Aristotelian, Stoic, Epicurean). From the second grew the Rhetorical Schools, that of Isocrates being the most famous. During the Cosmopolitan Period, when physical training was replaced by attendance at these higher schools, and when the various schools were brought into a loose unity under state oversight, the University of Athens came into being (about 200 B.C.).

ALEXANDRIA

In the division of the empire, which took place at the death of Alexander, Egypt fell to the Ptolemies, with Alexandria as the ruling city. Ptolemy I founded a library and a museum (an endowed college for scientific research), about 300 B.C. Scholars were invited to go to Alexandria and carry on their work at public expense. Ptolemy II and Ptolemy III continued this liberal policy.

WORK DONE

Down to 300 A.D.—the intellectual center of the world; philosophy, literature, grammatical, and rhetorical studies predominated; Roman emperors encouraged study there, especially Antoninus Pius and Marcus Aurelius.

Down to Roman Conquest (30 B.C.)—science and literature the chief fields of scholarship; *e.g.*, Euclid, Archimedes, Eratosthenes, beginning of Septuagint, poems of Theocritus, collection and preservation of classical manuscripts and settlement of Greek accents.

From 300 A.D. on—superseded in importance by Alexandria after Christianity became the official religion of the Roman empire; rhetoric and Neo-Platonic philosophy became focal in this period of the university's life.

From 30 B.C. on—philosophy the dominant interest; but some monumental work in science, *e.g.*, Ptolemaic theory of the universe; center of many heresies; earliest higher Christian schools near the university.

CULMINATION

Athens remained the stronghold of pagan thought after 300 A.D. In 529 Emperor Justinian forbade the teaching of all philosophy at Athens. This practically terminated the university.

The great library was destroyed by fire in the third century A.D., seriously crippling the work of the university. Final abandonment of work occurred when the Mohammedans occupied the city in 640 A.D.

QUESTIONS

- (1) Discuss the rise, growth and influence of the universities during the cosmopolitan period of Greek education.
- (2) Give examples of permanent contributions to scholarship made at the University of Alexandria.

CHAPTER V

ROMAN EDUCATION

- I. **Chronological Graph.**—The main time divisions of Roman education may be represented as follows:

Purely Roman	Transition	Greco-Roman	Decline
753 B.C.	250 B.C.	146 B.C.	200 A.D. 500 A.D.

- II. **Chief Contributions of the Romans to Civilization.**

—These were:

- A. **Genius for organization.**—This showed itself in politics, religion, art, literature, and education.

1. In politics, Rome achieved a great world empire; Persia approached this as did Macedon.
 2. In religion, Rome presented the model upon which the administrative structure of the Roman Church was patterned.
 3. In art and literature, Rome was conspicuous for organization and adaptation rather than for originality.
 4. In education, Rome borrowed extensively from the culture of conquered Greece, but organized what it borrowed into a system superior from the standpoint of administration to the original.
- B. Law.—The Roman Civil Law is at the basis of the systems of the Western world, except those of England and the United States, which go back rather to the Common Law.
- C. Literature—specific contributions in this field which have influenced scholarship since,—Virgil, Cicero, Horace, etc.
- D. Science—the contribution of Rome is rather in the field of applied than of pure science—mechanics applied to building roads, bridges, aqueducts, etc., science applied to agriculture.

III. **Social Institutions in Rome Compared with Corresponding Institutions in Athens.**—The important institutions which exerted a “by-educative” influence in the two cases were:

ROME

Family—a very significant institution in Roman life; father supreme, but mother held in high esteem. Father had priestly as well as teaching functions in the purely Roman period; the hearthstone the altar; household

ATHENS

Family—a weak institution in Athens; father seldom at home; mother had small part in education of the child; child relegated to care of a slave nurse. Exposure of undesirable infants (probably usually females) prac-

deities (*lares* and *penates*); great reverence for ancestors.

Camp—an institution for specific military training; physical exercise apart from preparation for war an idea foreign to the Romans.

Forum—a place where public meetings were held, where the Roman youth heard practical questions of state business expounded, and where students in the rhetorical schools during the Greco-Roman period made orations as part of their training.

Religion—in the purely Roman period the deities were conceived of as stern and inexorable; they were to be propitiated by sacrifices and ceremonies. This conception sanctified the family relations, the oath in court, and national group loyalty (patriotism); it had an intimate relation to conduct.

Religion of *duty*.

ticed and condoned by moralists (Plato, Aristotle).

Palestra and Gymnasium—institutions for physical training where bodily grace and harmony were the dominant aims.

Contact with Elders in Groves and Parks Adjoining the **Gymnasium**—an institution through which the Athenian youth heard the most abstract philosophical theories expounded and which took the place of higher education before the Sophists.

Religion—the Greek deities were magnified men and women; they were not far removed from mortals; honor was done them through the dance, poetry, music, and the other arts. Direct and powerful effect on the artistic impulse; slight effect on conduct.

Religion of *beauty*.

IV. Historic Divisions of Roman Education.—The significance of the time divisions shown in the graph is:

- A. Purely Roman Period—from the foundation of the city (753 B.C.) to the beginning of Greek influence in Roman life through the opening of Greek schools in Rome and the translation of the *Odyssey* into Latin (250 B.C.).
- B. Transition Period—from 250 B.C. to the burning of Corinth and the annexation of the Greek city-states to Rome as a province (146 B.C.).
- C. Greco-Roman Period—from 146 B.C. to the de-

velopment of despotism after the Antonines (about 200 A.D.).

- D. Period of the Decline—from about 200 A.D. to the closing of the pagan schools by decree of Emperor Justinian (about 500 A.D.).

V. Education During the Purely Roman Period.—

Politically this period includes the rule of the kings (to 509 B.C.), and the beginnings of the republic; it is featured by the long struggle for recognition of the plebeians against the patricians, during which the former succeeded in having the Laws of the Twelve Tables codified and set up in the market-place.

- A. The aim of education was moral, military, and vocational—the development of the *vir bonus*, the soldier, and the worker. The *vir bonus* (good man) was the man possessed of the virtues necessary to exercise his rights and to discharge his obligations. The virtues chiefly prized were (1) obedience, (2) manliness, (3) bravery, (4) honesty, (5) gravity.

- B. The organization of education was in terms of the home, where the mother supervised the early training of both boy and girl. Later the boy accompanied the father to the farm or shop, the girl learned homemaking from the mother. Only other institution was the camp for military training. It is doubtful if the *ludus*, an elementary school for teaching the rudiments, existed to any great extent before 250 B.C.

- C. The content of education consisted (1) on the *formal* side of the three R's, and (2) on the *content* side of ballads stressing traits esteemed by the Romans, of religious usages, and of the Laws of the Twelve Tables. In addition (3)

physical education consisted of games for the younger boys and girls, and of specific military exercises for the boys who had assumed the *toga virilis* (garb of manhood). Finally (4) *vocational* education embraced household training for the girl and farming or work in the shop for the boy. Poetry, music, gymnastics, so prominent in Athenian education, absent. Education for the earning of a livelihood, disdained by the Athenian freeman, given a respected place in Rome.

- D. The **method** of education was by direct imitation of concrete models—the characters of biography and story, the father, the mother; Laws of the Twelve Tables were to be memorized, not critically studied; great stress throughout on habit formation.
- E. The **discipline** was rigorous; corporal punishment and even death could be inflicted by the father under the power that was granted him by law, the *patria potestas*.

VI. Roman Education During the Transition Period.

—This period includes the spread of Roman power outside the Italian Peninsula, (a) through the Punic Wars against Carthage, ending in 146 B.C., (b) through the downfall of Macedon, 168 B.C. These foreign wars led to contact with other civilizations, especially the Greek, and a consequent widening of the educational horizon. Politically, the period falls entirely within the time limits of the republic (which covers the period from 509 B.C. to 31 B.C.).

- A. **Factors Making for Change.**—Many cultured Greeks were brought to Rome as slaves; one of them, *Livius Andronicus*, translated the *Odyssey* into Latin (250 B.C.); some Greek teachers opened schools in Rome to teach Greek and

Greek literature in Latin translations; Roman youths went to Greece for rhetorical training. Some Greek philosophers and rhetoricians appeared in Rome. Elementary schools (*ludi*) were set up by private teachers to teach the rudiments.

- B. **Factors Opposing Change.**—The native conservatism of Roman character made a sudden transformation impossible. *Cato* was the leader of the opposition; through his efforts philosophers and rhetoricians were expelled by the Senate (161 B.C.).

VII. Roman Education During the Greco-Roman Period.—This period begins with the conquest of the Greek city-states by Rome (146 B.C.), includes the extension of the boundaries of Rome through successive conquests, the beginning of the Empire under Augustus (31 B.C.), and closes with the triumph of despotism after the reigns of the Antonines (about 200 A.D.). It was during this period that the bulk of the contributions to world literature in the Latin language were written.

- A. **General Character of the Period.**—Roman hostility to Greek culture was slowly overcome, though it was not until the publication of Cicero's *De Oratore* (55 B.C.) that the change was complete. The Romans borrowed extensively from Greek literary models, Greek art, Greek religious conceptions. They took over the emphasis on oratory which had featured Athenian education during the Cosmopolitan Period, but of the Greek philosophies, they developed only the Stoic (*e.g.*, Seneca, Epictetus, Marcus Aurelius). Some Greek elements were entirely rejected as foreign to the Roman ideal (dancing, gymnastics), and

some were greatly changed in the process of borrowing (music).

- B. The aim of education became more intellectual, stressing language ability and success in argumentation and public speaking. But the Roman emphasis on moral character was retained: the orator was thought of first as the *vir bonus*, and only after that as the man skilled in speaking.
- C. The organization included three types of schools, at first all private, but as time went on (beginning with Vespasian, 75 A.D.), there was a growing tendency to bring the secondary and higher schools under state control and support.
- D. The salient features of content and method in these three types of schools may be compared as follows:

NAME OF INSTITUTION

ELEMENTARY	SECONDARY	HIGHER
School of the <i>Literator</i> — descendant of the earlier <i>ludus</i> ; teachers held in low esteem; <i>custos</i> accompanied child to and from school; never regarded by Romans as important part of system.	School of the <i>Grammaticus</i> ; this attracted Greeks as teachers; two types, (a) Greek grammar school, (b) Latin grammar school; Roman boy attended both, probably Greek school first.	School of the <i>Rhetor</i> ; a school specializing in public speaking and law; not attended by boys going into other vocations; at first Greek schools, but later this type superseded by Latin schools.

AGE LIMITS

From 7 to 10 years, and for both boys and girls.	From 10 to 16 years, for boys only.	From 16 years on, for boys; course 2 or 3 years.
--	-------------------------------------	--

CONTENT

Reading and writing Latin; reading texts being Laws of Twelve Tables and Latinized Odyssey; arithmetic elementary because of cumbersome Roman notational system.	Grammar and literature; wide range of authors; composition to develop a good style. Wide range of subjects to understand allusions in literature; music to improve intonation in oratory.	Declamation, debate on points of Roman law, extemporaneous speaking (sometimes in the Forum); ethical content stressed; Stoic philosophy.
--	---	---

METHOD

Alphabetic names of letters learned by rote, unassociated with written symbols; syllables then learned by rote. Writing taught through imitation of copy set by teacher. As with Greeks, writing was on wax tablets with a stylus; reading was from material previously written on wax tablet, manuscripts being scarce. Arithmetic taught with pebbles, abacus, etc.	Intensive drill on parts of speech, syntax, inflections, etc. Study of Latin and Greek writers passive, teacher dictating, pupil taking down verbatim. Points stressed: (1) panegyric on the author, (2) expansion of thought of the passage, (3) grammatical explanation, (4) comparison with other passages, (5) moral lesson drawn from the passage.	Declamation of memorized passages; much attention to intonation, articulation, etc., debates in which fine distinctions in Roman law were developed; pupils acted as advocates for plaintiff or defendant. Extemporaneous speaking included all important types (funeral orations, eulogies, etc.). Lectures by rhetor on wide range of subjects.
---	---	---

E. The University of Rome grew up during this period. Before about 75 A.D., there was no institution in Rome beyond the schools of the rhetors; Romans who wished a university education had to study abroad, at Athens, Rhodes, Alexandria.

1. Origin.—The practice of bringing manuscripts to Rome as part of the war plunder began

with Æmilius Paulus (167 B.C.). Out of this long-continued practice grew the library founded by Vespasian (75 A.D.). Later emperors (*e.g.*, Hadrian), aided professors and in other ways encouraged students and teachers to come to Rome. The institution is sometimes called the **Atheneum**.

2. **Nature of the Work Done.**—Neither philosophic speculation nor pure science appealed to the practical Roman. Grammar and rhetoric at first monopolized the course. Later, professional preparation in law, medicine, architecture, and mechanics was added. It was science in its applied form which claimed the Roman's attention.

F. Movement in Direction of State Control and Support.—Beginning in this period and continuing through the period of the Decline, the organizing genius of the Roman turned itself to educational matters, particularly to the schools of the grammaticus, of the rhetor, and to the Greco-Roman universities. Significant steps in this development were:

1. Payment of salaries to Greek rhetoricians in Rome—Vespasian.
2. Payment of salaries to Greek rhetoricians in the provinces—Antoninus Pius.
3. Exemption of many teachers from taxation, army service, and the obligation to support soldiers—Antoninus Pius.
4. Payment of salaries to selected teachers in University of Athens—Marcus Aurelius.
5. Public scholarships to children—Trajan.
6. Additional privileges to teachers—Constantine.
7. Emperor to pass upon all teachers—Julian.

8. Emperor alone to establish schools—Theodosius and Valentinian.

The decree of Julian was inspired by a desire to drive Christian teachers out of the Greco-Roman schools, but the other decrees were genuine attempts to encourage teachers and pupils to pursue their work within the empire, and to raise the standards of achievement in the schools.

G. **Educational Writers of the Period.**—Roman writers, on the whole, deal with educational problems in a practical way; there is in them little of the abstract speculation to be found in Plato's Republic or Aristotle's Politics. Their writings present a cross-sectional view of educational conditions as they actually existed in the period in which they wrote. The important Roman educational writers were (1) *Cicero* (De Oratore), (2) *Tacitus* (De Oratoribus), (3) *Suetonius* (De Grammaticis, De Rhetoricis), (4) *Quintilian* (De Institutione Oratoria). Quintilian's book, The Institutes of Oratory, is the most complete statement that has come down of the Roman conception of the orator and the training requisite for him. The following is an analysis of the book:

- a. The aim of education is to produce the good man skilled in speaking, the orator. The aim includes three factors—moral character, wide culture, ability to speak convincingly.
- b. The organization is to be, first a good home (servants to be selected very carefully), second a school where the boy is one of the group (he opposes tutorial training on about the same grounds that would be used by a modern

writer). Both the Greek and Latin schools should be attended, the Greek school first.

- c. The **content** is to be broad, since the orator is to be a cultured man as well as an able speaker.
- d. The **methods** of teaching and learning receive most attention, and occupy the biggest part of the book. Quintilian had himself been a teacher, the first subsidized by Vespasian. He attacks certain practices in the schools of his time, *e.g.*, learning the alphabetic names of the letters unassociated with their written symbols, hurrying boys into the rhetorical schools before they were properly grounded in linguistic and literary studies.
- e. The **discipline** in schools should be mild, and corporal punishment forbidden. In this matter Quintilian, like so many other educational writers, takes the position that proper methods of teaching will obviate the necessity for infliction of pain on the body.

VIII. Roman Education During the Period of the Decline.—This period opens with the centralization of political power in the hands of the emperor (about 200 A.D.), includes the public toleration of Christianity (313); the division of the empire into eastern and western sections (395), the beginning of the barbaric invasions from the north of Europe (410), and closes with the edict of Justinian closing the pagan schools (about 500 A.D.).

A. General Character of the Period.—*Politically*, despotism increased, the power of the Senate and of the courts became nominal, and the vital purpose for training in oratory thus dried up. *Economically*, the labor market became glutted with

slaves, Roman citizens found themselves unable to compete against them and voluntarily surrendered their citizenship either to enter the monastic life or to become serfs on the estates of the great proprietary landlords. *Morally*, the old conception of the *vir bonus* could not withstand the looser moral codes which came into vogue as Rome became more cosmopolitan; infanticide became common and imperial edicts attempted to combat it. *At the court*, a luxury-loving class of imperial favorites had to be maintained at public expense; burdensome taxes were imposed upon the provinces. The choicest posts *in the army* were given to the barbarians.

B. Education During this Period.—The aim of education degenerated; the old elements in the aim, the *vir bonus*, the worker, the soldier, dropped out; the Greco-Roman element in the aim, the good man skilled in speaking, lost its significance.

1. The schools were well attended, but by the leisure class.
2. Imperial subsidy and other forms of encouragement continued throughout.
3. Rhetorical training was sought for affectation and personal display; exhibitions were sometimes given at the theatre, or in the home.
4. During this period, rival Christian schools (catechetical schools) sprung up, with different ideals and a different constituency. The competition between the two types lasted until about 500 A.D., when the pagan schools were closed.

C. Educational Writers During this Period.—There were many important Christian writers on

education, but among the pagans the contributions which most influenced later education were Latin grammars, (1) that of Donatus (400 A.D.), and (2) that of Priscian (500 A.D.).

QUESTIONS

(1) Roman education has been called practical; show why and illustrate.

(2) Compare the physical education of the Romans with that of the Greeks in respect to (a) purposes, (b) means employed.

(3) Show how Greek education influenced civilization through the agency of the Romans.

(4) Give an account of the rhetorical schools of Rome as to (a) period when they flourished, (b) by whom controlled, (c) studies, (d) method of training, (e) normal age of students.

(5) Give an account of the education of a Roman boy of the wealthy class in the later days of the republic.

(6) Whom do you consider the greatest of Roman educators? Give reasons for your answer.

CHAPTER VI

CHRISTIAN EDUCATION DURING THE APOSTOLIC AND PATRISTIC PERIOD

I. Christ "The Great Teacher."—Some elements observable in Christ's method are:

A. Oral and personal instruction; the use of simple language to teach the most sublime truths.

B. Encouraged questions; gently rebuked followers for entertaining questions which they did not ask.

C. Prepared hearers for truths to be taught; *e.g.*, teaching of the Real Presence preceded by miracle of loaves and fishes.

D. Drew extensively upon previous knowledge of the people; frequent reference to Old Testament.

- E. Adjustment of lessons to experience of those taught, through association with phenomena of social life and of nature; *e.g.*, parable of the sower, of the husbandman and his wicked servants, of the marriage feast; analogies with the lilies of the field, the birds of the air, etc.
- F. His own life exemplified His teaching; *e.g.*, obedience to authority, humility, observance of the Law, charity, etc.

II. Subdivisions of the Apostolic and Patristic Period.—

From the standpoint of the attitude taken towards the Greco-Roman culture, three sub-periods may be distinguished: (1) down to 180 A.D., during which time the Christian schools developed independently, (2) from 180 to about 400, during which time there was a tendency to select and borrow from the pagan studies, (3) from about 400 to 500, during which time the Christian schools were separating from the Greco-Roman culture, which movement culminated in the closing of the pagan schools by a Christian emperor, about 500 A.D.

III. The First Sub-Period—to the opening of the first advanced schools under Christian auspices.

A. General Character of the Period.—The early Christian ideal was both unworldly (stressing withdrawal from the active life of the times), and otherworldly (stressing beatitude after death as the supreme end of human life). The unworldly element had appeared in Plato and Aristotle, who had emphasized the life of contemplation as higher than the life of civic participation. But the emphasis on the life after death was distinctively Christian. The first problem of Christian education, therefore, was personal salvation. The first requisite for personal salvation was baptism; hence

the earliest schools were schools to prepare for the reception of the sacrament of baptism; these schools were:

B. The Catechumenal Schools.

1. The aim of these schools was to give sufficient moral and religious training to prepare for baptism. (Compare with the aim of the Greco-Roman schools.)
2. The organization was informal, a bishop, priest, or deacon (later a minor cleric or layman) meeting the candidates for baptism or the inquirers during the week in a special portion of the church building. Both sexes were admitted. The home was also an important educational institution, the mother occupying an honorable place.
3. The content consisted of reading and memorizing the Scriptures (after beginning of second century), of the doctrines of the Church, the ritual, and the observances of the Christian life. Greco-Roman content—philosophy, physical training, pagan literature, grammar, rhetoric—were rejected, first because worldly in spirit, and second because early converts to Christianity were from lower classes and did not relish the culture which had differentiated their masters from themselves.
4. The method was that of the question and answer—the catechetical.

IV. The Second Sub-Period—from the establishment of the earliest higher Christian schools to the Council of Carthage, at which philosophical and literary study was prohibited.

A. General Character of the Period.—As Christianity made converts among the upper classes, its atti-

tude towards the Greco-Roman culture became more friendly, (1) because the learned pagans brought into the Church their love of this culture, and (2) because Christianity, formerly a despised sect, now attracted the attention of the learned pagan world, was assailed, and trained controversialists to meet its opponents. The schools which developed were:

B. The Catechetical Schools—first of these was established at Alexandria by Pantænus, 179 A.D. Other important schools of this type were founded at Cæsarea, Antioch, Edessa, and Nisibis in the East. These later became the means through which the Mohammedan scholars came in contact with Greek philosophy, science, etc.

1. The aim of these schools was to offer an advanced education to Christian students.
2. The content included courses in Greek literature, history, dialectics, and the sciences.

C. The Episcopal or Cathedral Schools.—During this period the Church was perfecting its organization. One phase of this was the establishment of training schools for the clergy. The school established in each bishopric for the education of the clergy was the episcopal school. With the victory of Christianity over paganism, the catechetical schools disappeared, and the episcopal schools remained as the higher schools of Christian learning.

1. The aim was to prepare priests for their work. In general, these schools educated the secular clergy (clergy of the world), while the monastic schools educated the regular clergy (those living under the "regula," or monastic rule).
2. The organization at first consisted of direct training of the prospective priests by the Bishop;

later the teaching function was delegated to one of the cathedral canons, the "scholasticus" (hence later, "schoolmen," "scholasticism"). Out of the cathedral schools, some of the medieval universities developed, *e.g.*, Paris.

3. The content in the stronger schools (Arles, York, etc.) included Scripture and theology, literary and philosophical studies. In most of the cathedral schools, however, the moral and spiritual formation of the student took precedence over intellectual training, and the content resembled that of the monastic school.

D. Attitude of the Church Fathers Towards Greco-Roman Learning.—The Greek Church Fathers (Clement, Origen, Basil) favored the use of pagan studies in the training of Christian youth; if proper selections were made, these studies could be of great service. The Latin Church Fathers (Tertullian, Jerome, Augustine) while deeply learned in the classical literatures, feared their effect on Christian morality. The Latin attitude finally triumphed and ushered in the third sub-period.

- V. The Third Sub-Period**—from the Council of Carthage to the closing of the pagan schools. The Christian schools of this period were Latin schools, and the growing tendency was to study pagan writers only from compendia put together by Christian writers. This neglect of the Greek language and of the classical writers in the original form was not characteristic (*a*) of the Irish schools, and (*b*) of the catechetical schools of the East.

QUESTIONS

- (1) Show the characteristics of the work of Christ that entitle him to be called "The Great Teacher."

(2) Show some fundamental differences between Christian education and pagan education.

(3) What purpose was served by (1) the catechumenal schools, (2) the catechetical schools?

(4) Mention the different views held by the early church fathers in regard to the study of pagan literature. Show how the decision of this question affected education for a thousand years.

CHAPTER VII

CHRISTIAN EDUCATION DURING THE MONASTIC PERIOD

I. Growth of Monasticism to its Definite Organization.

—The two elements in the monastic ideal (1) world renunciation, (2) body mortification, had existed in the Christian ideal itself. They were accentuated in the more ascetic spirits who fled from the centers of population, subjected their bodies to rigorous discipline, and aimed to develop "the habit of the presence of God." Some of the contributory causes of this fleeing from the world were (1) the persecutions of Christians, (2) desire of the more spiritual to differentiate themselves from the large numbers who entered the Church for mixed reasons when Christianity was officially tolerated (313 A.D.). There were two forms of the movement:

A. The first was the hermit or *anchoritic form*. This appeared early with Paul and then with Anthony in Egypt (monk, monos, alone). It made no educational contribution.

B. The second was the community or *cenobitic form*. This appeared with Pachomius in Egypt (350), was introduced by Basil into Greece, and by Athanasius

nasius and Jerome into Rome. It made a large educational contribution. The organization of community monasticism became definite with the formulation of the Rule of Benedict (529 A.D.). As time went on, it was adopted by all the orders of the West.

II. The Rule of Benedict and its Educational Implications.

A. Article 48 of the Rule provides (1) that every monk do seven hours of manual work a day, and (2) that every monk read two hours a day.

1. From the manual work requirement followed the development of skilled artisans in wood, leather, and metal; the draining of swamps and the restoration of large areas for agriculture; also the spreading of agricultural information to the peasants and the dignifying of manual labor.

2. The reading requirement necessitated the copying of manuscripts, led to the collection of manuscripts in libraries, and implied a training in reading and writing for the monks.

B. The Rule of Benedict, like other rules, imposed the vows of poverty, chastity, and obedience. The purpose was to detach the monks from worldly interests; *e.g.*, poverty was the negation of private property (though the community might own land).

III. **Schools in the Monasteries.**—Because of the wide extent of the monastic schools topographically (Scotland to Egypt), and chronologically (from the sixth century to the twelfth), generalizations are likely to be inaccurate. The following analysis, however, stresses the salient features.

A. **Aim.**—(1) Broadly, the aim of monastic education was the same as the aim of the monastic life itself—the salvation of the soul; (2) narrowly, the

aim in the weaker schools was to teach reading, writing, psalmody, and the computum (calculation of the Church calendar); in the stronger schools it was to teach the seven liberal arts.

B. Organization.—The customary age of admission to the monastery was ten years, of admission to the monastic order, eighteen years. Some monastic schools admitted boys who did not intend to take monastic vows (distinction between oblati and externi). The head of a monastic school was the abbot.

C. Content.—The Seven Liberal Arts, consisting of (1) the Trivium—grammar, rhetoric, dialectic, (2) the Quadrivium—arithmetic, astronomy, geometry, music. These terms had a wider content than we assign them to-day, *e.g.*, grammar included literature, geometry always included the rudiments of geography, rhetoric included history. While Virgil and Cicero were well known, most of the subjects studied were approached through compendia or encyclopedias. Those most commonly used were (1) *Capella's* Marriage of Philology and Mercury, (2) *Isidore of Seville's* Origines, (3) *Boëthius's* texts on logic, ethics, arithmetic, geometry, and music.

D. Method.—The question and answer method was in general use; dictation by the teacher was frequently resorted to; there was much appeal to the memorative faculty.

E. Discipline.—Severe, growing out of the general ascetic ideal of monastic life.

IV. Other Features of Monastic Education.

A. Convents for girls corresponding to monasteries for boys grew up during this period, teaching reading, writing, and the elements of learning. Usually the rules of the female orders required that weaving

church hangings and embroidering altar cloths and church vestments be done, and these arts had to be taught to the novices.

- B. Some famous monasteries were (1) Cluny and Tours in France, (2) Fulda and Reichenau in Germany, (3) York and Canterbury in England, (4) Monte Cassino in Italy, (5) Kildare in Ireland.
- C. Some monastic orders besides the Benedictines were (1) Cistercians, founded 1098, (2) Celestines, founded 1254, (3) Franciscans, founded 1208, (4) Dominicans, founded 1216.

V. Educational Revivals During the Monastic Period.

—There were two important revivals in education between 500 and 1100 in which the political and religious factors combined. These were (1) the revival under Charlemagne, and (2) the revival under Alfred the Great.

A. Revival under Charlemagne (about 800 A.D.).

1. The aim of Charlemagne's revival was to effect a cultural unity among the people of his empire to reinforce the religious and political unity which had already been achieved.
2. The means used were those most readily available, monks, monastic schools, cathedral schools.
3. The steps in the revival were (a) the establishment of the itinerant Palace School under Alcuin of York for the education of the nobility, (b) the issuance of decrees called capitularies to abbots for monastic schools, and to bishops for cathedral schools, calling for a better educated clergy, (c) the sending of inspectors called missi dominici to the schools to see that the capitularies were carried out.
4. The scholars connected with the revival were (a) *Alcuin*, who served as head of Charle-

magne's school system and then as abbot of Tours; a textbook writer; a conservative towards the question of teaching pagan classical writers (especially Virgil) in Christian schools; (b) *Rabanus Maurus*, pupil of Alcuin, abbot of Fulda, more liberal than Alcuin towards the classical literature; friendly to the study of dialectic; (c) *John the Scot*, who served as head of the Palace School under one of Charlemagne's successors; introduced interest in Greek philosophy from Ireland; stressed study of Greek Church Fathers and dialectic; sometimes called the forerunner of scholasticism.

5. The results of the revival were (a) a renewed interest in continental Europe in the classical learning, (b) a higher standard of education among both secular and regular clergy, (c) the establishment of separate divisions in the monastic schools for *externi* and *oblato* by Charlemagne's successor, 817, (d) establishment by bishops of parish schools for elementary education where they did not already exist.

B. Revival under Alfred the Great (about 875 A.D.).

1. The aim of Alfred's revival was to raise education from the decay into which it had fallen since the days of Alcuin, due to internal wars and the invasions of the Danes.
2. The means used were the monks, Alfred sending to the continent as Charlemagne had sent to England.
3. The steps in the revival were (a) a Palace School for the training of the nobility; Saxon as well as Latin was taught, (b) monasteries encouraged to strengthen their schools, (c) translating and editing in the vernacular, Anglo-

Saxon, of religious and historical works by Alfred himself, (d) compilation of the Anglo-Saxon Chronicle begun.

4. The scholars connected with the revival were (a) *Grimbald*, who came from Flanders to become abbot of Winchester, (b) *John the Saxon*, who came from Corbie to become abbot of Athelney, (c) *King Alfred* himself.
5. The results of the revival were (a) an increase in the number of monastic schools, (b) the appearance of the first prose works in English, (c) parish schools were ordered established by ecclesiastical law.

QUESTIONS

(1) Name four men prominently identified with Christian education prior to 1000 A.D. and give an account of the work of one of them.

(2) Write on monasticism, using the following heads: (a) a description of the monastic orders, (b) names of three orders, (c) the seven liberal arts, (d) special work done by the monasteries.

(3) Show (a) how the educational views of Charlemagne influenced education in Germany, (b) how the educational views of Alfred the Great influenced education in England.

(4) Account for the rise of monasticism and the monastic schools. In what ways did they make positive contributions to education and general human progress?

(5) Show the educational importance of the Benedictines, giving some account of their aims, the studies pursued in their schools and their general influence on civilization.

CHAPTER VIII

CHRISTIAN EDUCATION DURING THE
SCHOLASTIC PERIOD

- I. General Character of the Period.**—On the main line of Christian education (see graph, page 11), this period is characterized by the predominance of interest in philosophy and by the establishment of the medieval universities in which this interest found lodgment. The general history of the period is conspicuous for the Crusades (from about 1100 to 1300) and the growth of the feudal structure of society. Towards the end of this period the growth of cities and of a citizen class (burghers) necessitates new types of schools.
- II. Origin and Meaning of Scholasticism.**—The causes contributing to this new development in Christian scholarship were (1) the cessation of the barbarian invasions, making it possible for the Church to give more attention to its thought life, (2) the introduction into Christian Europe of Moorish philosophy, which had its roots in Greek philosophy, (3) the skepticism of returning Crusaders concerning doctrines previously accepted unquestioningly, (4) a vigorous study of theology at the cathedral schools, approached now in a different spirit and with a different method.
- A. Scholasticism may be defined as the application of systematic logical analysis to theological doctrines by Catholic thinkers.
- III. Controversy Between Realists and Nominalists.**—The scholastics tended to divide into two camps on the basis of their attitude towards faith and reason. The two views became connected also with differences of

a philosophical kind. The controversy may be represented as follows:

PHILOSOPHICAL DIFFERENCE

REALISTS

Ideas, concepts, are the only real existences; objects known through the senses are merely copies of these ideas. Class names therefore stand for real existences. Based on Neoplatonism.

NOMINALISTS

Ideas, concepts, are only names; objects known through the senses are the only real existences. Akin to Aristotle's conception of the species.

PRACTICAL DIFFERENCE

Faith anterior to and superior to reason; reason reliable only as it supported revealed doctrine. This position orthodox.

Implied the sufficiency of human reason; this position heterodox.

REPRESENTATIVES

Anselm, eleventh century.
William of Champeaux, twelfth century.

Roscellinus, eleventh century.
Abelard, twelfth century; his philosophical position was not nominalism, but conceptualism, but his influence was distinctly heterodox.

Duns Scotus, fourteenth century.

William of Occam, fourteenth century.

IV. Other Important Schoolmen.—Some of these were:

- A. *Peter Lombard*, pupil of Abelard and teacher at Paris; author of the *Sentences* (Opinions), used as a text in the schools of the time.
- B. *Thomas Aquinas*, author of the *Summa Theologiæ* (Sum of Theology), the best exposition of Roman Catholic theology.
- C. *Albertus Magnus*, *Roger Bacon*, *Vincent of Beauvais*, who represent another side of scholastic

activity—interest in scientific study and experimentation.

V. Method of Presentation in Scholastic Writing and Teaching.—Scholasticism was essentially a method of logically examining fundamental doctrines. As the movement progressed, two methods were worked out.

A. Method of Logical Analysis.—This is illustrated in the chief writings of Aquinas and Peter Lombard. The steps in the method were: (1) statement of the thesis or proposition, (2) its proof, (3) citation of solutions other than the orthodox with a refutation of each, (4) consideration of objections to the orthodox solution with the answer to each. This method was strong in clear systematic arrangement and definite conclusions.

B. Method of Multiple Interpretation.—The steps in the method were: (1) statement of the thesis or proposition, (2) statement of the several possible interpretations with the difficulties of each, (3) final selection of the favored interpretation, (4) statement of problems growing out of selected interpretation, (5) various solutions of these problems. Abelard's book, *Sic et Non*, represents an extreme form of this method; the proposition is stated in the form of a question (*e.g.*, Does God know all things, or not?), various answers to the question are given with the citation of authorities for each, and finally, sometimes the most satisfactory answer is indicated, and sometimes not. This method was weak so far as definite conclusions were concerned, and must have left students confused; it was, however, a stimulus to thought.

VI Results of the Scholastic Movement.

A. It gave new life to the cathedral schools, and thus contributed to the rise of the universities.

- B. It made the Latin language a better instrument for philosophical discussion since fine distinctions in thought were paralleled by fine distinctions in language.
 - C. It systematized the knowledge of preceding centuries in its great writings, though it did not add much that was new.
 - D. It greatly enhanced the authority of Aristotle, who became the philosopher of the Church, and whose authority was sometimes powerful enough in the universities to discourage investigation and independent thinking.
 - E. It was an intellectual discipline; arguments for and against stated propositions were to be carefully weighed; all was to be subjected to logical analysis.
- VII. The Medieval Universities.**—The general causes for the rise of these institutions were (1) the intellectual quickening at the cathedral schools (scholasticism) which caused large numbers of students to flock to these centers and necessitated a larger and more flexible type of school, (2) the renewed interest in secular studies (law, medicine, etc.) which grew out of contact with Saracen culture, the Crusades, and the growth of cities.
- A. **Methods of Beginning.**—(1) Some universities existed “de facto” for a long time before they were given charters, (2) some were chartered outright by pope, king, or Holy Roman Emperor, (3) some arose when students and masters, dissatisfied with conditions, emigrated from one university and set up a new one.
 - B. **The Earliest Universities.**—Local causes determined the type of work at some of the earliest university centers; sometimes the presence of a great

teacher was an important factor. The chief data for three of the earliest universities may be represented as follows:

UNIVERSITY	CHIEF STUDY	LOCAL CAUSE	GREAT TEACHER	DATE
Salerno	Medicine	Health Resort	Constantius Africanus	1080; never received a charter
Bologna	Civil and Canon Law	Struggle of North Italian Cities for Independence	Irnerius and Gratian	1158, charter from Holy Roman Emperor
Paris	Theology	Proximity to Cathedral School of Notre Dame	Abelard	1180, charter from French king; 1198 charter from pope

C. External Organization of Universities.

1. Whole body was the *studium generale* or *universitas* (guild) *magistrorum et scholarium*. This was subdivided into
 - a. *Nations*—groups of students from the same part of the world, each of which annually elected a councillor.
 - b. *Faculties*—groups of masters teaching the same subjects, each of which annually elected a dean.
2. The councillors and deans elected a rector who served with delegated power as the executive officer of the university. In the South, where students were more mature, the rector was usually a student (Bologna the type); in the North, rector was usually a master (Paris the type).
3. Privileges were given to the universities to encourage masters and students to remain; these were guaranteed by charter. The most important were (a) exemption from taxation, (b) exemption from military service, (c) special courts outside civil jurisdiction, (d) immunity of person, (e) power to grant license to teach.

(f) privilege of suspending work as protest against local persecution (*cessatio*).

D. Internal Organization of Universities.—Since the university was a guild, its education shows the three guild stages, apprentice, journeyman, master.

1. Apprentice—student entered at from 12 to 14, attached himself to a master; studied under him until he could “define and determine,” *i.e.*, until he had completed the arts course. He was then a bachelor.
2. Journeyman—bachelor studied under various masters in his selected field until he could “dispute,” *i.e.*, until he could defend a thesis. This thesis was his “masterpiece” and its defense entitled him to the *licentia docendi* (license to teach).
3. Master—he now entered into competition with the other masters of the guild, charging fees for his work.

E. Content and Method at the Universities.

1. Content.—A complete university consisted of four faculties: arts, medicine, law, theology. The language of all teaching and of all texts was Latin. (a) In the arts course the medieval trivium and quadrivium were taught; (b) in medicine texts by Galen and Hippocrates (Greeks) and by Arabic and Jewish doctors prevailed; (c) in civil law, the *Corpus Juris Civilis*; in canon law, the *Decretum* of the monk Gratian; (d) in theology, the *Sentences* of Peter Lombard was the chief text; Roger Bacon scored the neglect of the Scriptures themselves. Extensive glosses and annotations were used along with the standard texts in all courses.
2. Method.—There were two distinct methods

used, (a) the lecture (*i.e.*, reading) of the text and glosses thereon so that students might have an authentic copy of the authoritative work; "the master read a book, the student listened to a book," and (b) the disputation or debate, in which a thesis was proposed, the proof of it given, objections raised, and the whole treated in a minutely logical manner.

F. Some Important Results of the Universities.—

Among these may be cited:

1. They broke down isolation and provincialism by bringing citizens of all states together.
2. They were democratizing agencies; priests, nobles, burghers, as members of the university, shared the same privileges.
3. They served as courts of arbitration and as a check on arbitrary power; disputes between the political and the ecclesiastical powers were referred to them for settlement, *e.g.*, that between Philip VI and Pope John XXII.
4. They served as models for many of the features of modern universities; modern English colleges grew out of hostels or boarding places of students; degrees, examinations, division of faculties, etc.

QUESTIONS

(1) Name the subjects included in the Seven Liberal Arts. Write briefly on the origin and history of the Seven Liberal Arts as a course of study.

(2) What were the causes that led to the establishment of the early European universities? Name two men prominently associated with these universities.

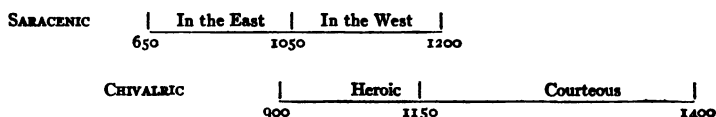
(3) Briefly explain how the activities of the scholastics helped to prepare the way for the Renaissance and the Reformation.

(4) State the original organization and purpose of the universities.

CHAPTER IX

SARACENIC AND CHIVALRIC EDUCATION

I. Chronological Graph.—The main time divisions of these two educational movements, both off the main line of Christian education, may be represented as follows:



II. Saracenic Education.—This educational movement begins about 650 A.D., when the Koran was reduced to writing, and extends to about 1200, when the Moorish scholars were driven out of Spain. The date 1050, which divides the line, was the time when the intellectual Mohammedans left Bagdad, Damascus, and other eastern centers and fled to the more liberal caliphates of Africa and Spain.

A. First Period.—Mohammedanism, moving up from Arabia, came into contact with the centers of Greek thought in Syria (Antioch, Edessa, Nisibis). Mohammedan scholars rendered into Arabic the Greek mathematical, philosophical, and medical writers; they also applied themselves to Hindu mathematical lore and did original work.

1. *Avicenna*, author of the *System of Medicine*, was a product of this period.
2. The *Brothers of Sincerity* published an Encyclopedia in 1000 A.D., comprising a scheme of higher education culminating in theology.
3. Elementary schools for both boys and girls were

established; religion and geography, as well as the three R's, were taught.

4. The fanatical orthodox party opposed these attempts to intellectualize Mohammedanism, and the Brothers of Sincerity were driven from the Orient (1050).

B. Second Period.—In Africa and Spain the Mohammedan scholars continued their work. The chief centers of culture were Cairo, Alexandria, Cordova, Granada, Toledo, and Seville; Toledo was especially famous.

1. *Averroës*, who became the authoritative commentator on Aristotle in the Christian medieval universities, was a product of this period.
2. Colleges (in the literal sense; *i.e.*, students and professors lived in them) arose in the chief Moorish cities of Spain; in these the sciences were taught by experimental methods and important discoveries in chemistry, physics, surgery, etc., were made; many of the teachers were Jews, and Christians were among the students.
3. Arithmetic progressed when the clumsy Roman notational system was replaced by the system which the Arabs had borrowed from the Hindus.
4. As in Syria, elementary (mosque) schools were established for boys and girls.
5. During the early thirteenth century, the orthodox party again asserted itself, and the Moorish scholars with the Hellenistic culture they had nurtured, were suppressed.

C. Influences of Saracenic Education.—These were:

1. Greek writings, some of which had previously been known in the Christian schools, through

- excerpts in the compendia on the seven liberal arts, were brought to the attention of Christian scholars in Latin translations from the Arabic.
2. The Hindu decimal system was given to Western Europe.
 3. Moorish colleges served as models for some of the features of the new Christian universities.
 4. Saracen writers, in Latin translations, became authorities in the universities, *e.g.*, Avicenna and Averroës.
 5. Much of permanent value in science was added to the cultural heritage of all nations, *e.g.*, sulphuric and nitric acids, the pendulum clock.

III. Chivalric Education.—This educational movement began about 900 A.D., when the feudal system had crystallized in its main outlines, and continued until the sixteenth century, by which time it had spent itself and degenerated into fantastic forms. The date 1150 A.D. may be regarded as marking off the first period, the Heroic, from the second, the Age of Courtesy.

A. Relation Between Feudalism and Chivalry.—

The century after Charlemagne (900-1000) was an age of disorder in Western Europe, (1) because of the weak successors who ruled the divided empire, (2) because of the inroads of Mohammedans, Slavs, and Hungarians. The relations between landed nobles and tenants, which had grown up as private relations much earlier, were now erected into a form of government. In return for protection from the overlord, the smaller lords owed various services to him, among them military service. The rules and the social usages which grew up governing this service and the preparation for it constituted chivalry (*chevalerie*, *cheval*, since the service was rendered on horseback).

1. The **knight** was a lord who had gone through a prescribed training, and taken prescribed vows; just as
2. The **monk** was a member of the clergy who had gone through a prescribed novitiate and taken prescribed vows.

B. Aim and Ideals of Chivalric Education.—(1) In the Heroic Age, the ideal knight was devoted to God, his country, and his king; the *Chanson de Roland* typifies this ideal. There was no definite system of training. (2) In the Age of Courtesy, the ideal knight was (a) loyal to the Church (vow of religion), (b) loyal to his feudal superior (vow of honor), (c) loyal to his lady (vow of gallantry); the lyrics of the Troubadours depict this ideal. There was a definite system of training during this period; it aimed to inculcate the "rudiments of love, war, and religion."

C. Stages in the Education of a Knight.—These were:

1. From birth to 7—the home was the school, the mother the teacher; physical health, religious training, and respect for superiors the content.
2. From 7 to 14—the boy was known as a *page* or *valet*; the castle of his father's feudal superior was the school; the lady and lord of the castle were his teachers. The content was (a) training in etiquette, reading and writing (the vernacular or French), playing the harp, singing, dancing, chess, and religious instruction; these were taken care of by the lady; (b) development of skill in riding, jousting, boxing, and wrestling; these were supervised by the lord.
3. From 14 to 21—the youth was known as a *squire*

- (shield-bearer); the castle, the field of battle, and the tournament-ground were the schools; the lord was the teacher; the Seven Free Arts (jousting, falconing, swimming, horsemanship, boxing, writing and singing verse, and chess) made up the content. Many services on the person of the lord were required and this period prepared directly for the knighting, which came
4. At 21—it was preceded by impressive religious ceremonies, and culminated in the taking of the oath and the actual “dubbing.”

D. Results of Chivalric Education.

1. It placed emphasis on a phase of education which both monasteries and universities had neglected—physical training.
2. It stressed manners and courtliness, thus refining the coarseness of the age; this stress was to be revived during the Italian Renaissance.
3. It elevated the attitude toward womanhood; this service was confined to a class, however, for the ideal of gallantry was not broad enough to include all classes of women.
4. The exploits of knighthood gave inspiration and content to the developing vernacular literatures.

QUESTIONS

- (1) Show how the Mohammedans during the Middle Ages influenced education among the Christian peoples of Europe.
- (2) “The education of the Middle Ages was either that of the cloister or the castle.” Compare these two systems as to object of education and means employed. (See Monastic Education.)
- (3) Show the value of chivalry as an educational force.

CHAPTER X

**EDUCATIONAL SITUATION AT THE BREAK-UP
OF THE MIDDLE AGES**

- I. Work of the Mendicant Friars.**—These preachers and teachers were an important educational force in the late Middle Ages.
- A. The *Franciscans* were founded in 1208 by Francis of Assisi; the *Dominicans* were founded in 1216 by Dominic.
 - B. They gave an advanced training to their members as compared with earlier monastic orders.
 - C. They established themselves at the university centers and wielded a big influence in university work.
 - D. Some of the greatest of the scholastics were members of the Franciscans (Roger Bacon, Duns Scotus, William of Occam), or of the Dominicans (Albertus Magnus, Thomas Aquinas, Vincent de Beauvais).
 - E. The vow of poverty interpreted in a very literal sense led to the practice of seeking alms; the mendicant life thus sanctioned was imitated by the university students, some of whom migrated from university to university (wandering students, Goliardi).
 - F. The preachers of the courts and of the Crusades were usually Dominicans.
- II. The Schools Before 1200.**—Throughout the period between 900 and 1200, the three classes in European society were:
- A. The **Clergy.**—These were educated in either cathedral or monastic schools as well as at the universities which were springing up towards the close of the period.

B. **The Feudal Nobility.**—These were educated in the knightly system of training at the courts.

C. **The Landless Serfs.**—These received what education they got at the parish and song schools connected with the churches and cathedrals, and at the externi department of the monastic schools.

III. **New Schools After 1200.**—As a concomitant of the Crusades, there took place the growth of cities, increase in trade and commerce, the rise of a new citizen class. There came a demand for new types of schools in which the new class could be educated. The schools which arose to meet the demand were:

A. **Chantry Schools.**—These grew out of bequests stipulating that masses were to be read for the repose of the soul of the deceased patron. Many of these bequests required that the priest was to devote some time to the instruction of the children of the city in the rudiments. There were 300 of these schools in England alone at the time of the Reformation (1536).

B. **Guild Schools.**—The guilds themselves (both merchant and craft) were a development of the late Middle Ages. Two types of education developed around them:

1. The vocational training, with its stages of apprentice and journeyman, leading to admission into the guild as a master.
2. Elementary schools for the children of the craftsmen, supported by the guilds, and taught by the priests who performed religious functions (baptisms, marriages, etc.) for the guild members. Some of these expanded into advanced Latin schools, *e.g.*, Merchant Taylors', London.

C. **Burgher Schools.**—These arose in the growing

cities, were supported and controlled by the public authorities. Though usually taught by a priest, they were more secular in spirit than the monastic, cathedral, chantry, or parish schools.

QUESTIONS

(1) How did the Crusades promote education in Europe? (See also Scholastic Education and Universities.)

(2) Show that feudalism was the social basis of medieval education. (See also Chivalric Education.)

(3) To what important educational movements did the mendicant friars contribute.

MISCELLANEOUS QUESTIONS

(1) Name two nations of antiquity in which education honored the home. Show in each case how such education affected the civil or political life of the people.

(2) What characteristics of the work of Socrates entitle him to rank among great teachers?

(3) Show in what essentials the education of the Athenians was superior to that of the Orientals.

(4) Mention in each case at least two particulars on which three of the following men agree with modern educators: Plato, Aristotle, Seneca, Quintilian.

(5) Give approximately the period during which scholasticism flourished. Name three famous scholastics and briefly describe the work of one of them.

(6) What was the main purpose of education in the best days of Athens? of Rome? How did these purposes compare with that of the early Christian schools?

(7) Account for the tendency to asceticism among the early Christians. What educational good has been the result of this asceticism?

(8) Give approximately the date of the final abolition of pagan schools in the Roman empire? What other event of importance occurred at about the same time?

(9) Contrast the educational ideals of the early Christians with those of the Romans of the early Empire.

(10) Discuss the character and the extent of education among the people in the time of Charlemagne.

(11) Mention three benefits conferred on civilization by the monasteries of the Middle Ages. Discuss one of these benefits.

(12) Name two centers of Saracenic learning and tell what the Saracens did for education during the Middle Ages.

(13) State two means by which the Greco-Roman learning was revived after having been driven out of Europe.

(14) What was the attitude of the early Christians toward (a) the study of the classics, (b) universal education, (c) physical education? Give a reason for their attitude in each case.

(15) State the characteristic features of the educational system of the Jews.

DRILL IN CHRONOLOGY

(1) Place on the proper line, and on the proper division on that line on the Chronological Chart on page 11, the following: (a) Thomas Aquinas, (b) Isocrates, (c) Avicenna, (d) Donatus, (e) Pantænus, (f) Lycurgus, (g) Pachomius, (h) Euclid.

(2) Do the same for the following schools: (a) Academy, (b) Salerno, (c) Beth ham-Midrash, (d) Palace School, (e) Monte Cassino, (f) University of Alexandria, (g) School of the Grammaticus, (h) Palestra.

(3) Do the same for the following events: (a) closing of the pagan schools, (b) establishment of compulsory elementary schools in Palestine, (c) first university charter, (d) publication of Mohammedan Encyclopedia, (e) beginning of community monasticism, (f) translation of the Odyssey into Latin, (g) Council of Carthage, (h) establishment of externi department in monastic schools.

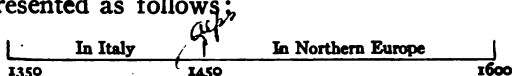
(4) Do the same for the following educational classics: (a) Rule of Benedict, (b) System of Medicine, (c) Republic, (d) Laws of the Twelve Tables, (e) Priscian's Grammar, (f) Marriage of Philology and Mercury, (g) Institutes of Oratory, (h) Politics.

MODERN TIMES

CHAPTER XI

EDUCATION DURING THE RENAISSANCE

- I. **Chronological Graph.**—From the educational point of view, the main divisions of the Renaissance may be represented as follows;



- II. **The Two Divisions of the Movement.**—The significance of the date 1450, used as a dividing point, is that it represents roughly (1) the establishment of the first chair of Greek north of the Alps, at Paris, (2) the invention of printing, (3) the fall of Constantinople to the Turks.

A. **Comparison of the Two Divisions.** *Local*

1. The Renaissance in Italy stressed personal culture and individual development; the Renaissance in the North, social reform.
2. The Renaissance in Italy tended towards a revival of paganism which induced a counter-movement under Savonarola; the Renaissance in the North was religious in spirit and fused with the Protestant Revolt and the Catholic Reaction.
3. The Renaissance in Italy harked back to the writers of classical antiquity to get at the long-forgotten ante-Christian way of looking at life (hence humanities, humanists, humanism); the

Renaissance in the North added Hebrew to Greek and Latin studies because of the additional interest in biblical and patristic sources.

4. The Renaissance in Italy was aristocratic; the Renaissance in the North, especially in its later stages, was democratic.
5. In both Italy and the North the Renaissance passed through a first stage (broad humanism) into a second stage (narrow humanism).

III. The Renaissance in Italy.

A. *Why it Began There*—Italy felt the quickening influences of the late Middle Ages more keenly than the rest of Europe because

1. *Politically*, independent city-states offering great opportunities for personal advancement had evolved from the struggles against the Holy Roman Emperor, the counts, and ecclesiastical domination.
2. *Economically*, these city-states had increased their wealth and prestige as a result of the Crusades and the concomitant development of trade and commerce.
3. *Culturally*, the tradition of Roman culture had persisted more strongly among the Italians than among any other people. With patriotic fervor they sought to exploit their cultural heritage.

B. *Petrarch (1304-1374), as a Type of the Italian Humanist Scholar*.—Some of the greatest of the Italian humanists were Guarino and his son, Boccaccio, Barzizza, and Vergerius. But the various phases of their work are well typified in the activities of Petrarch.

1. *Destructive Work*.

- a. He attacked the existing universities as "nests of gloomy ignorance."

- b. He attacked Aristotle as "in error all his life."
- c. He repudiated the otherworldliness ideal and the whole range of scholastic learning.

2. *Constructive Work.*

- a. He collected and copied Latin manuscripts, especially those of Cicero.
- b. He wrote works in Latin designed to make the great men of antiquity real to his contemporaries (*De viris illustribus, Epistolæ*).
- c. He wrote sonnets in Italian which reflect the Renaissance emphasis on the emotional life.
- d. Though not a Greek scholar, he inspired others to get back to the Greek literature through the Greek language.
- e. He secured the establishment of humanistic studies at the University of Padua. Other universities followed (*e.g.*, Florence) in spite of opposition from the "Trojan" party.

C. **Chrysoloras (1350-1415) and the Greek Revival in the West.**—The earliest Italian humanists, like Petrarch, knew no Greek. But the desire to get back to the literature on which the Romans had built led to translations of Homer into Latin (1367) and to invitations to Greeks to come to Italy and teach. Chrysoloras was the first and most famous of these imported Greeks. His activities were:

- 1. He became professor of Greek at the University of Florence (1396). This was the first chair of Greek in the West since the sixth century. Other universities followed Florence.
- 2. He taught at other Italian universities (Milan, Pavia).
- 3. He wrote a Greek grammar which became the

basis for instruction in the language for the Italians.

4. He began a literal translation of Plato's *Republic* into Latin.
5. He was the first of a long line of Greek teachers who fired the enthusiasm of Italians for Hellenic culture. This movement was greatly accelerated by the fall of Constantinople.

D. The Court School as the Typical Institutional Product of the Italian Renaissance.

1. *General Character of Court Influence*—The ruling princes in the Italian city-states were ardent patrons of humanism. Typical examples of this influence were the Visconti at Milan, the Medici at Florence, the Montefeltri at Urbino, and the Popes Nicholas V, Julius II, and Leo X at Rome. The principal channels through which this patronage was dispensed were:
 - a. Support of the Academies founded in all important Italian cities for literary study.
 - b. Establishment and upbuilding of libraries (Medicean at Florence, 1444; Vatican at Rome, 1450).
 - c. Maintenance of Court Schools.

E. Vittorino da Feltre (1378-1446) as a Type of Renaissance Schoolmaster.—Some court schools were those at Mantua, Florence, Venice, Padua, Verona, Ferrara. Vittorino opened the school at Mantua in 1423.

1. The *aim* of this school was harmonious development of mind, body, and morals (the Greek "liberal education"). The ideal personality with the Italians was the person of fully-rounded development. Specialization was condemned, though local conditions might ascribe more

weight to one factor than to others; *e.g.*, (a) at Florence letters and civil ability would transcend military factors, (b) at Urbino the military ingredient would be conspicuous (Castiglione, "The Courtier"), (c) at Venice, the judicial, diplomatic, and naval service would lift other elements into prominence.

2. Features in the *organization* were:
 - a. Support from the ruling family at Mantua, though pupils paid fees; the poorest were taught free.
 - b. Education was secondary, boys being admitted at 9 and retained until 21; girls of great families studied at home under humanists retained by citizens of position.
 - c. The boys lived at the school.
3. The *content* consisted of
 - a. On the *intellectual* side the languages and literatures of Greece and Rome, the medieval trivium and quadrivium—with a distinct shift of emphasis from logic to mathematics, grammar, and rhetoric.
 - b. On the *physical* side a wide range of exercises combining Athenian and knightly elements (running, fencing).
 - c. On the *moral* side the patristic as well as the classical writers; manners as a corporate part of moral education.
 - d. On the *esthetic* side dancing and music.
4. The *method* showed a genuine attempt to adjust work to the capacities of individual pupils, conceived of Latin and Greek as living languages, and stressed expression and self-activity.
5. The *discipline* was mild; a powerful motive for application existed in the fact that the highest

posts in the life of the fifteenth century were open only to those with a thorough humanistic training.

F. Results of the Court Schools.—Chief among these were:

1. Rivalry with the Arts faculty of the universities. This led to a broadening of university work in order to compete in attracting the best minds of the day.
2. Established the conception that Latin and Greek are indispensable to a liberal education; this idea was to dominate Europe for almost five centuries.
3. Served as patterns for the *Fürstenschulen* (Princes' Schools) of Protestant Germany.

✓ IV. The Renaissance in the North.

A. Agencies through which Movement Spread to the North.

1. Brethren of the Common Life (Hieronymians; patron St. Jerome). A non-monastic order founded at Deventer, Holland (1376). Work before 1450 was to give popular Christian education, especially in the Bible; work after 1450 added classical literature and Hebrew to this Christian training.
 - a. Thomas à Kempis (author of *Imitation of Christ*) was the best representative of the ascetic piety of the Brethren; Erasmus, of its broad literary spirit.
 - b. Among their pupils or teachers were the following, who profoundly influenced Northern Renaissance education: Erasmus, Reuchlin, Sturm, Wessel, Hegius, Wimpfeling, Agricola, and Melanchthon.

- c. Most of their schools were elementary and secondary; some, however, covered the work of the Arts faculty of the universities. Many of their pupils taught in the universities and they established the *Collège of Montaigu* at the University of Paris. By 1450 (when the Renaissance scaled the Alps) they had almost fifty schools in the Netherlands, the German states, and France ready to welcome it.
 2. Wandering scholars from Italian schools visited the countries of the North; northern scholars (many of them Hieronymians) went to Italy to study.
 3. The French kings, Charles VIII and Louis XII, tried to enforce hereditary claims in Naples, Florence, Rome, and Milan. Politically these attempts failed; culturally they brought the French into direct contact with humanism at its sources.
- B. Accelerators of the Renaissance in the North.**—Not causes of the Renaissance, but events which gave it additional momentum were
1. The invention of printing (1450).
 2. The fall of Constantinople to the Turks (1453).
 3. Great progress in geographical discovery with which the names of Vasco da Gama, Columbus, and Magellan are connected.
- C. Erasmus (1467-1536) as a Type of Northern Humanist Scholar.**—Dutchman, trained by Hieronymians at Deventer, studied in other countries, including Italy. Influence exerted
1. Through Lectures—First lecturer on Greek at Cambridge.

2. Through Correspondence and Advice—Especially the help given Colet in founding St. Paul's School, London.
3. Through Prolific Writings—These may be classified as follows:
 - a. *Religious*—Greek Edition of the New Testament, translation of New Testament into Latin, paraphrasing of Church Fathers, especially Jerome (patron of Hieronymians). Reformatory as well purely scholarly aim in this work.
 - b. *Educational*—These writings were of two kinds:

Satirical—Adages, maxims attacking ecclesiastical abuses; Colloquies, an arraignment of existing social abuses; Praise of Folly, a virulent attack on certain phases of monastic life; Ciceronians, an attack on narrow humanism.

Constructive—Under this head were first, a number of Latin and Greek textbooks; second, two works giving his educational theory (The Liberal Education of Children and The Right Method of Study). Significant points in his theory were the belief in universal education, the condemnation of corporal punishment, the emphasis on a broad content study of Latin and Greek authors, the order of elements in the aim of education—piety, learning, moral duty, manners,
4. The following outline places Erasmus, a typical Northern humanist, in juxtaposition with Petrarch, a typical Italian humanist, and Luther, a typical Protestant Reformer:

ATTITUDES	PETRARCH	ERASMUS	LUTHER
Towards Church	No conflict. Many high Church officials were humanists. Patriotic fervor took the place of religious zeal	Bitterly attacked what he believed were moral evils. No doctrinal attack	Both moral and theological attacks. Finally advocated disruption
Towards Common People	Aristocratic. Not an advocate of popular education	Tried to improve elementary education. Chief stress, however, on upper-class education	Great advocate of universal education at state expense.
Towards Vernacular	Contributed to it (Sonnets) as well as to classics	Gave no attention to it at all. All writings in Latin or Greek	Great stress on it. Educational pamphlets, hymns, catechisms in German.

D. Renaissance Education in France.

1. *Court Influences*—Francis I, who came to the throne in 1515, patronized humanistic studies. With the help of Budaeus a royal press was set up at Paris, libraries were built, and a new type of institution, *Collège de France*, stressing Latin, Greek, and Hebrew, was established.
2. *In the Schools*—The universities through Hieronymian influence and through the work of French humanists like Corderius, broadened their work, adding chairs of Greek. Secondary humanistic schools were founded by many French municipalities, the *Collège de Guyenne* at Bordeaux serving as the pattern.

E. Renaissance Education in England.

1. *Court Influences*—Henry VIII and Elizabeth patronized humanistic studies, brought pressure to bear on the universities to reorganize their work, and established regius (royal) professorships in the classics.
2. *Contributions to Educational Literature*—Two expositions of the humanistic ideal had large later influence.

- a. Elyot's *Governour* (1531)—In this book Sir Thomas Elyot describes the training requisite for the man of public affairs. As with the Italians, specialization finds no place; liberal education, *i.e.*, education of body, mind, and moral character, is the objective. Latin as a living language, Greek for its literature, history (but only of the ancient period), ethics through the classical authors and selected parts of the Old Testament, drawing, music, and dancing (but not with great skill as the aim), and a wide range of physical exercises make up the content. The influence of Quintilian, Erasmus, and the Italian humanists is evident throughout. However, Elyot advocates tutorial training and not the group training of the Italian Court School.
 - b. Ascham's *Scholemaster* (1570)—In this book Ascham, who had tutored Queen Elizabeth, attacks the brutal discipline of contemporary schools, the method of single translation in the study of Latin and Greek, and the over-emphasis upon grammatical rules. He recommends the method of double translation in Latin and Greek study, *i.e.*, translation of a passage from Latin into English and retranslation into Latin with a final comparison between the original and the student's own retranslation. He recommends also the study of grammatical rules through the recognition of examples of them in translation work.
3. *In the Schools.*
 - a. The universities made place for the new

learning; Oxford through the efforts of Grocyn, Linacre, and Colet; Cambridge through the efforts of Erasmus.

- b. The first secondary school on the new lines was St. Paul's, London, refounded by Colet (1510), in which careful religious instruction was coupled with Greek and classical (vs. monkish) Latin. In spite of confiscations by Henry VIII which accompanied his break with Rome, many new schools were founded patterned upon St. Paul's, and many old schools were made over on the new basis.

F. Renaissance Education in the Germanies.

1. *Court Influences*—Because of lack of centralization such as existed in England and France, political friends of the new learning were more circumscribed in their influence. Among the more conspicuous patrons were Duke Moritz of Saxony, who patronized both university and secondary education, and the authorities in the commercial city of Nuremberg, in southern Germany, who opened a secondary humanistic school of the Gymnasium type.

2. *In the Schools.*

- a. Higher—The old universities went over slowly on the new basis (Erfurt the first); new universities were founded humanistic from their inception (Wittenberg the first). Melanchthon and Reuchlin were protagonists in these movements,—another reflection as in England and France of Hieronymian influence.
- b. Secondary—The Renaissance spirit found lodgment in two types of secondary schools. *Fürstenschulen*—These were broadly human-

istic boarding-schools established by Protestant princes out of income confiscated from Catholic monasteries (hence sometimes called *Klosterschulen*, cloistral schools). They were never numerous and they fused later with the *Gymnasien*.

Gymnasien—These were narrowly humanistic day schools, controlled by the cities. The progenitor of this type was the three-class Latin school recommended by Melanchthon in his Saxony School Plan (1528) and established by the municipalities in Saxony. The school which determined the type, that of Sturm at Strassburg, grew out of these.

Sturm's Gymnasium at Strassburg (1538)—The aim of this school was piety, knowledge, and eloquence. Its *organization* called for ten classes, the beginning of the class-for-each-year plan in Germany. Its *content* consisted of the Lutheran catechism, parts of Jerome, and of the New Testament—for piety; intensive study of Latin and Greek grammar and of a few selected authors, especially Cicero—for knowledge; training in speaking and writing Latin with Cicero as model—for eloquence. The physical training, music, etc., of the Italian Court School found no place. Its *method* stressed imitation and memory, called for Latin as the language of the classroom, made extensive use of pupil monitors, and motivated classical study by the acting of plays in Latin and Greek. Its *discipline* was severe, and the thousand pupils in the school before Sturm

left it were trained in an atmosphere of precision and regularity pervaded by the military spirit.

G. Decline of Broad into Narrow Humanism.—By broad humanism is meant the study of classical literatures for a better understanding of “the pursuits and activities proper to mankind.” By narrow humanism is meant the study of Latin (with slight attention to Greek) in order to develop an elegant Latin style. From 1550 on, narrow humanism was distinctly in the ascendant. In its narrowest form it was called Ciceronianism.

1. The Court Schools in Italy, the early Collèges in France, St. Paul’s School and the Grammar Schools patterned on it in England, and the Fürstenschulen in Germany were all of the broadly humanistic type. These schools all became narrowly humanistic as time went on. The Gymnasien in Germany and the Latin Grammar Schools in the American colonies were narrowly humanistic almost from the start.

2. Some writers who raised a protest against the narrowing tendency were Erasmus in his *Ciceronians* (1528), John Brinsley in his *Grammar Schoole* (1612), and the Realists of the sixteenth and seventeenth centuries. For a long time they were “voices crying in the wilderness.”

H. Lineal Descendants of Renaissance Schools Today.—This historical connection may be summarized as follows:

Country	Renaissance School	Descendant To-day	Place in Present System	Age Limits (Approximate)
Italy	Court School	Ginnasio	Follows higher primary; precedes Liceo, which latter leads to University	10 to 15
France	Collège	Collège Communal	Follows preparatory classes attached to it; leads to University	10 to 17
England	Grammar School	Grammar or Public School	Follows preparatory schools; leads to University	12 to 18
Germany	Gymnasium	Gymnasium	Follows Vorschule; leads to University	9 to 18
America	Latin Grammar School	High School	Follows elementary school; leads to College	14 to 18 or 12 to 18

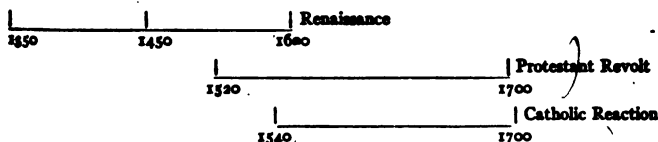
QUESTIONS

- (1) Write about 200 words on "The Sixteenth Century Renaissance on the Continent and in England."
- (2) Describe Ascham's method of studying the classics, and compare its value with that of some method in use at present.
- (3) Give a brief account of Humanism in (a) Italy, (b) Germany.
- (4) Discuss the educational work and influence of Erasmus.
- (5) State the points of difference and of similarity between the Humanistic movement in Italy and that in Germany. Name a representative of the movement in each country.
- (6) What were the chief points of difference between Scholasticism and Humanism? Name a great leader of each movement and give the century in which he lived.
- (7) Show the difference between a public high school of to-day and Sturm's gymnasium.

CHAPTER XII

EDUCATION DURING THE PROTESTANT REVOLT AND CATHOLIC REACTION

I. **Chronological Graph.**—These two movements placed alongside of the Renaissance may be represented as follows:



II. **Background Considerations.**—The graph indicates why most Northern humanists were found on one side or the other of the paramount religious issue. Erasmus, More, Vives, Colet, and Wimpfeling remained within the Roman Church. Melanchthon, Corderius, Sturm, Ascham, and Elyot aligned themselves with the Reformers. The Northern Renaissance had been religious, reformatory, and intensely critical (Erasmus as a representative). It passed over into a revolt against the Roman Church when it became clear that political, social, and economic aims could be achieved by various groups if the Church were weakened.

III. **Educational Phases of the Protestant Revolt.**—The three clearly marked divisions are (1) that under Luther in Germany (1520), (2) that under Calvin in Switzerland (1537), (3) that under Henry VIII in England (1534).

A. The Movement in Germany.**1. Protestant Principles and Their Educational Implications.**

- a. Subjectivism*, the principle that individual judgment is sufficient to ferret out the truth as contained in Holy Writ. This implied that Holy Writ be put in the language of the people, that the people be taught to read the vernacular, that schools to teach reading be opened for both boys and girls.
- b. Innate Depravity*, the principle that the individual is prone to evil and that only an abiding faith in Divine mercy can effect salvation. This implied that masses, penances, good works, etc., so emphasized in the medieval schools, could be dispensed with. It implied also either a stern repressive discipline (Calvinistic schools) or a sympathetic allowance for the weaknesses to which human nature is heir (Jansenistic schools).
- c. State-Church Cooperation*, the principle that "religion goes with the land," that the religious choice of the prince shall determine the religion of his subjects (1555). This implied first, that the schools of a given political unit would teach but one religion; second, that they would receive public support in their work.

- 2. Luther (1483-1546) as a Type Protestant Theorist.**—Luther established practically no schools, but in two important writings, both in German, he set forth his educational views. The writings were the *Letter to the Mayors and Aldermen* (1524) and the *Sermon to Parents* (1530). His translation of the Bible into Ger-

man, his two vernacular catechisms, and his hymns were also indirectly educational. His views may be summarized as follows:

- a. Vernacular primary schools should be established for boys and girls. This part of Luther's program was carried out by Bugenhagen in the cities and states of northern Germany.
- b. Attendance at these schools should be compulsory.
- c. The compulsory attendance at the vernacular school should be at least for "an hour or two a day"; the remaining time could be given to learning a trade. Luther was not advocating vocational schools, but attendance at school for those learning trades outside.
- d. The content of these schools should be broadened to include physical training and singing as well as reading, writing, and religion (Lutheran).
- e. The state should support these schools, as well as Latin secondary schools. State support was a prominent feature in the work of Melanchthon in Saxony and Sturm at Strassburg.
- f. The classics, Latin, Greek, and Hebrew, should constitute the chief subjects in these secondary schools, since the perpetuation of a learned clergy was their chief aim. Melanchthon, Sturm, and Trotzendorf carried out this stress on classical secondary training, though Latin overshadowed Greek and Hebrew in their work.
- g. The secondary course should be enriched by the inclusion of rhetoric, dialectic, history

(for an understanding of social institutions), science (for its religious value), mathematics, music, and gymnastics. Bugenhagen and Neander put into operation this broadened secondary curriculum.

- h.* In addition Luther emphasized the importance of the teacher's work, the need for better methods, and the civic aim in education.

B. The Movement in Switzerland.—Through the efforts of Calvin (1537) and of Corderius, the following developments took place:

1. Elementary schools were recommended for Genevese boys and girls to teach the 3 R's, religion, and grammar.
2. Secondary collèges to train leaders for church-state offices were established, teaching the humanistic studies (Latin, Greek) and the Calvinistic religion. To this content which was characteristic of all Northern humanistic schools, was added logic, rhetoric, and elocution as bearing on the work of the minister, and French.
3. The influence of Calvinism, especially its emphasis on elementary schools for the people, was reflected outside of Switzerland as follows:
 - a.* By the Huguenots in France.
 - b.* By the Dutch Reformed in the Netherlands and America.
 - c.* By the Presbyterians in Scotland under Knox.
 - d.* By the Puritans in England and America.

C. The Movement in England.—Here the Revolt was essentially political and not religious. Individual interpretation of the Bible did not figure and so the educational implications from it did not follow.

1. Negative Effects.

- a. The dissolution of the monasteries (begun 1536) and the confiscation of their property took away many of the opportunities that had formerly existed for an elementary and Latin secondary education. The destruction of church foundations also swept away the chief dispensers of charity and necessitated (along with other conditions) a series of laws for poor-relief culminating in the English Poor Law (1601).
 - b. In Ireland, the penal laws forbade Catholics to educate their children, Protestants to teach Catholics, Catholics to go abroad for an education. In spite of these restrictions Irish schools were founded in Belgium, France, Spain, Portugal, Bohemia, and Italy. The "hedge schools" attempted, under great difficulties, to carry on "felonious" elementary education.
2. Positive Effects.
 - a. Under Elizabeth and the first two Stuarts, many secondary Grammar Schools were founded by private endowments; these were humanistic-religious and modeled on St. Paul's School. Some of the present-day "Public Schools," (*e.g.*, Harrow) were among these. But in 1662 (Act of Uniformity) all non-Anglican teachers were driven out of these schools.
 - b. The Tudors encouraged university education, founding new colleges (*e.g.*, Trinity College, Cambridge), and royal professorships. But here also religious restrictions were established. No nonconformist could receive a

degree at the universities between 1558 and 1871.

QUESTIONS

(1) "The education of the Renaissance is best represented by Erasmus; that of the Reformation by Luther and Melanchthon." Give a reason for naming each of these men as a representative of a period.

(2) Show why Philip Melanchthon has been given the title 'Preceptor of Germany.'

(3) What signal service did Luther render to the cause of universal education in Germany? What were his main arguments for the establishment of popular or universal education?

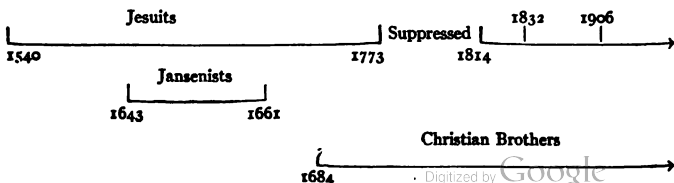
(4) What was the chief practical outgrowth of the Reformation in respect to education?

(5) Compare the educational effect of the Reformation in England with its effect on the Continent.

IV. Educational Phases of the Catholic Reaction.—The Church's response to the disaffection of large numbers of its communicants took form

1. In the Council of Trent (1545-1563), which standardized the training of the clergy throughout the world in cathedral schools, and ordered parish schools reopened wherever they had declined.
2. In the teaching work of religious orders, notably the Jesuits, Christian Brothers, and Jansenists (nominally Catholics, though embracing heretical tenets).

A. Chronological Graph of these Orders.



Christian Brothers

1684

Digitized by Google

B. Educational Work of the Jesuits.—Founded in 1540 by a Spanish nobleman-soldier, Ignatius Loyola, suppressed by Pope Clement XIV in 1773, re-established in 1814 and still in existence. The Society of Jesus carried on an educational work the extent of which is conveyed by the following figures: in 1773 there were 200,000 pupils in their schools and 22,000 members in the Order, about half of whom were engaged in teaching; in 1910 there were over 16,000 members in the Order.

1. The *aim* of the Society is crystallized in the motto "All for the greater glory of God," abbreviated from the Latin equivalent into O. A. M. D. G. Of the three lines of activity—preaching, teaching, confession—the second received more emphasis than ever before in a religious order.
2. The *organization* is provided for in the *Ratio Studiorum* (1599).

- a. **External Organization.**—A great international society with a democratically elected General Superior at its head, appointed Provincials over each province, appointed Prefects (of teaching and discipline) in each school, and a teaching staff of Jesuit fathers, of students who have finished part of their work and who are teaching in the secondary schools preparatory to finishing the rest of it, and of laymen.
- b. **Internal Organization.**—There were two types of schools, secondary and higher, free, for boys only, and open to both interni and externi.

Secondary Schools.—Admission at about 10 years of age, covering 6 years, followed

16-18

for prospective Jesuits by 2 years of spiritual preparation (*Novitiate*).

19-21

21-23

23-28

Higher Schools.—First, Faculty of Philosophy (Arts course) covering 3 years, followed for prospective Jesuit teachers by 2 years of normal training (*Juvenat*) and 5 years of teaching in secondary schools (*Regency*). Second, Faculty of Theology covering 4 years, which for prospective Jesuits follows the Regency and is followed by ordination to the priesthood and a final year of spiritual preparation (*Tertianship*). For externi, faculties of law and medicine, as well as other graduate schools have been developed alongside the faculty of theology.

3. The *content* down to 1773 was as follows:

a. Secondary Schools.—Latin, Greek learned through the Latin (vs. Jansenists), religious and moral instruction made to function through religious and moral training, and careful attention to health and sports were the features. The combination of humanism and religion is typical of the secondary schools of the period (*e.g.*, Gymnasien). The attention to physical development is a differentiating feature. Reforms in 1832 and 1906 (see graph) have greatly broadened the curriculum.

b. Higher Schools.—First, the 3 years in Philosophy had as its nucleus scholastic philosophy, but Latin classics and rhetoric, as well as logic were included. Second, the four years in Theology centered about theology, philosophy, and oriental languages. In both the philosophy and graduate courses the curriculum has been broadened, the

elective principle introduced, and great flexibility permitted, especially since 1906 when each Provincial was permitted to adjust the work to local needs. Examples of these developments are

1. Growth of schools of law and medicine.
2. Growth of other graduate schools, some of which are now open to women.
4. The features of *method* in Jesuit schools were
 - a. Oral teaching, taking the lecture form in the higher courses, the form of the *prelection* (careful analysis of the passage studied, including the *erudition* or explanation of all allusions) in the lower schools.
 - b. Thoroughness, achieved through daily, weekly, monthly, and yearly reviews.
 - c. The use of Latin as the vehicle of all instruction, with great appeal to the memorative faculty.
 - d. The careful preparation of selected teachers followed by supervision of these teachers by the Prefect of Studies.
 - e. The use of pupil monitors as hearers of lessons (no longer a feature of Jesuit schools).
5. The *discipline* of the Jesuit schools was based upon two factors:
 - a. A complete avoidance of corporal punishment as an incentive to study; a very sparing use of it in dealing with extreme cases of misconduct. When used, it was administered not by the teacher but by a special official, the *Corrector*.
 - b. A strong appeal to both individual and group emulation; to individual emulation in the device of rivals (*trippers*, *aemuli*), and to

group emulation in the battles of questions between the class divisions of Rome and Carthage.

C. Educational Work of the Jansenists.—A group of men and women, sometimes called Port Royalists, holding in common

1. Religious beliefs formulated by a Belgian bishop, Jansen, and stressing innate depravity, denying free will, opposing penance and confession.
2. Philosophical beliefs formulated by Descartes, and stressing the sufficiency of human reason.
3. The educational significance of their work is best understood when compared with that of the Jesuits as carried on in the seventeenth century.

DURATION

JANSENISTS

First school established 1643; all schools closed 1661. Schools confined to France,

JESUITS

Established 1540; in existence to-day. Schools in most of the countries of the world.

AIM

To effect the spiritual salvation of a few selected children.

O. A. M. D. G., to train leaders who would advance the cause of the Church and Christian society.

ORGANIZATION

(1) Secondary schools for boys under the Gentlemen, for girls under the Nuns of Port Royal.

(2) Loose organization among teachers; no special preparation.

(3) Schools small (called "les petites écoles"); classes of only or 6.

(1) Secondary schools for boys only; higher schools for boys only.

(2) Splendid organization; careful selection and training of teachers.

(3) Schools large; classes so large as to require help of pupil monitors.

CONTENT

(1) The classics occupied a conspicuous place, but not to the exclusion of French, through which they were approached.

(2) No specific religious instruction or ethical instruction; dependence on environment and imitation of teacher.

(3) Physical training neglected.

(4) Other subjects emphasized were logic and mathematics; no natural science.

(1) Essentially classical schools, the vernacular getting no place either as a subject of study or as the vehicle of instruction.

(2) Definite religious and moral instruction but made to function through religious and moral training.

(3) Physical training stressed.

(4) Other subject-matter came only in the Prelection.

METHOD

(1) Latin approached through study in vernacular of easy Latin literature.

(2) Reading to be taught phonetically—by beginning with the pronunciation value of letters, not with alphabetic names.

(3) Nothing to be memorized which is not first understood.

(1) Latin approached directly, but some ability to read Latin required for entrance.

(2) Much appeal to memory through reviews, etc.

DISCIPLINE

(1) Corporal punishment not used.

(2) All appeal to emulation, individual or group, tabooed because of distrust of human instincts.

(3) Constant teacher oversight; distrust of unwatched activities.

(4) Chief dependence on auto-emulation.

(1) Corporal punishment rarely used.

(2) Emulation freely appealed to.

(3) Delegation of disciplinary power to various pupil officials.

D. Educational Work of the Christian Brothers.—

An order of Catholic brothers (not priests) founded in 1684 by LaSalle, devoting itself exclusively to male education and still in existence in most countries of the world.

1. *Background of LaSalle's Work.*—Some of the significant steps in the field of elementary education in Catholic countries before 1684 were

- a. The decree of the Council of Trent that parish schools be reopened wherever they had declined.
- b. The work of the Piarists founded at Rome (1617).
- c. The work of the Brethren of St. Charles founded at Lyons (1666).
- d. Two obstacles prevented these attempts from reaching large success: first, the absence of a succession of well-trained teachers; second, the difficulty of holding teachers in the field of elementary teaching when the prestige and more attractive conditions of secondary schools beckoned.

2. *Origin of Christian Brothers.*—Working among the poor at Rheims, LaSalle opened an elementary school for them (1679). The success of this determined his life work. The obstacles above mentioned were provided against

- a. By the foundation of a brotherhood of men sworn to teaching.
- b. By a prohibition against the teaching of Latin.
- c. By the establishment of normal schools with attached practice schools to train the brothers for their work.

3. The *aim* of these elementary schools was "Chris-

tian education, especially of children of artisans and the poor." The school life was interpenetrated with religious asceticism.

4. The *organization* was outlined in the *Conduct of Schools* (in French), corresponding to the *Ratio Studiorum* of the Jesuits.
 - a. *External Organization*.—An international teaching society with headquarters to-day in Belgium. The structure is roughly analogous to that of the Jesuits; an elected Superior General, appointed Brother Visitors over each district, appointed Brother Directors over each school.
 - b. *Internal Organization*.—The types of schools founded before LaSalle's death—all free and for boys only—were elementary schools, technical schools, normal schools (for interns only). Since LaSalle's death, through amendments to the *Conduct of Schools*, the Christian Brothers have expanded their activities to include secondary schools, colleges (e.g., Manhattan College, New York City), and protectories which give vocational training to juvenile delinquents.
5. The *content* in their elementary schools consisted of the four R's—religion, reading, arithmetic, and writing. Religious teaching was dogmatic, the catechism forming its backbone. All instruction was in the vernacular.
6. The *method* was conspicuous for the following innovations:
 - a. The simultaneous method of teaching, in which the pupil recites, reads, etc., not to the teacher individually, but to the whole class. This socialized school work, and made grad-

ing necessary. Grading had been a feature of secondary schools like Sturm's and the Jesuits', but it was new in elementary education.

- b. Careful preparation of elementary school teachers. The Jesuits had been training teachers for their secondary and higher schools since 1565; writers on education (Mulcaster in 1581, Bacon in 1605) had recommended training of elementary teachers. But the normal schools of the Christian Brothers were pioneer institutions.
- 7. The *discipline* of the Christian Brothers' schools differed from that of the Jesuits and Jansenists; corporal punishment was used, but the Conduct of Schools prescribes minutely under what conditions and to what extent.

E. Other Educational Phases of the Catholic Reaction.

- 1. *Founding of Other Religious Orders Primarily Devoted to Education.*—Some of these were: (a) Order of Ursulines, founded 1535, (b) Sisters of Notre Dame, 1598, (c) Visitation Nuns, 1610, (d) Sisters of Charity of St. Vincent de Paul, 1633, (e) Sisters of St. Joseph, 1650. These congregations did for elementary education in Catholic countries what social reformers and Anglican organizations attempted to do in England.
- 2. *Developments in Female Education.*
 - a. While Jesuits and Christian Brothers confined their efforts to the education of boys, some religious orders, like the Sisters of Notre Dame, worked exclusively with girls, and some, like the Jansenists, made provision for both boys and girls.

b. Work of Fénelon (1651-1715).—Archbishop of Cambrai, private tutor to the young Duke of Burgundy, Superior of the Convent of New Catholics at St. Cyr, where he supervised the training of young women converted from Protestantism, Fénelon was both theorist and practical schoolman. His work *Treatise on the Education of Girls* (in French) contained the following positions:

1. The education of women is as necessary for the good of society as that of men.
2. Education is their right, since they too were redeemed by the blood of Christ.
3. Early education should follow nature, respecting the child's questions and depending on imitation.
4. The content should begin with illustrated stories in the vernacular, should stress fables and religious stories throughout, should include writing, grammar, arithmetic, law as bearing on the home, ancient history and French history, music, art, and embroidery.
5. All education should be according to the girl's rank and station in life.

QUESTIONS

(1) When and how long did the schools of the Jansenists or Port Royalists exist? Give a brief account of the character of their work.

(2) Give the chief differences in aim and method between the Port Royalists and the Jesuits.

(3) Give an account of the Jesuit schools as to (a) preparation of teachers, (b) subject-matter taught, (c) method of teaching.

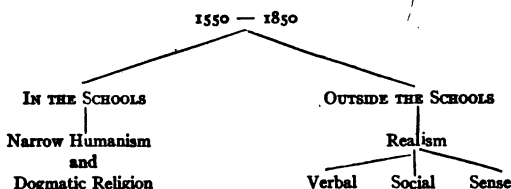
(4) State and explain the contributions of permanent value made to education by the Christian Brothers.

(5) Name any one of the works of Fénelon and show its pedagogic value.

CHAPTER XIII

THE REALISTIC MOVEMENT IN EDUCATION

I. Relation to Renaissance, Protestant Revolt, and Catholic Reaction.



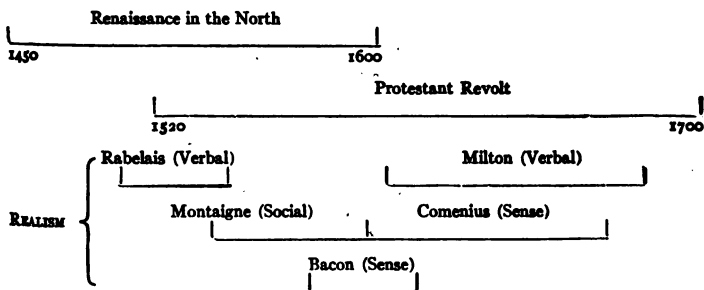
II. **Meaning of the Realistic Movement.**—The term Realism is applied to that point of view which held that education should concern itself with the realities of life. It attacked the schools which had eventuated from the Renaissance and Protestant Revolt because first, they were too devoted to Latin linguistics, and second, too insistent upon doctrinal religious teaching. Three characteristics of the movement should be noted:

A. While agreeing that the schools were not making adequate preparation for practical living, the Realists differed among themselves as to how such preparation should be given. This difference is the basis for the classification into (1) Verbal or Humanistic, (2) Social, (3) Sense or Scientific.

B. Most of the Realists worked outside the schools. They should be thought of as writers and thinkers, most of them primarily concerned with other things, who turned to the matter of education at some time during their lives, and have left us their

reactions to the problems involved. For example, Rabelais, Milton, Montaigne, and Bacon were not primarily educators; Comenius had other major interests besides education; Mulcaster and Ratke constitute exceptions, since they were above all things teachers.

- C. The Realistic Movement was synchronous with the Renaissance and Protestant Revolt. Further, the various phases of the Realistic Movement were synchronous with one another. This is brought out by the following graph:



III. Verbal or Humanistic Realism.—The chief characteristics of this phase of Realism were:

1. A belief that education should aim at giving a "knowledge of human motives, of human life in institutions, and of life in contact with nature"; hence a difference from narrow humanism which stressed mastery of Latin style.
2. The utilization of classical literature as the best means of preparing for life; hence a bookish point of view and a close resemblance to the early Renaissance attitude.
3. The inclusion of a large amount of pure and applied science in the curriculum, but this also to be studied through the ancient writers.

A. **Rabelais, a Sixteenth Century Exponent.**—Monk, pastor, scholar, physician, "madcap." Rabelais in his famous satires, the *Life of Gargantua* and the *Heroic Deeds of Pantagruel*, had no influence on the schools, but later influenced the Frenchmen Montaigne and Rousseau, and the Englishman Locke.

1. The *aim* of education is the development of the whole man, physically, morally, intellectually. Education wider than instruction.
2. The *organization* is in terms of a tutor; every hour of the day is to serve some educational end.
3. The *content* is gigantic, but Gargantua is the giant son of a giant father. Rabelais was sketching a curriculum from each part of which selections might be made. A wide range of physical games and sports; moral and religious training through Bible study and not through the catechism—a reaction against both Catholic and Protestant schools; intellectual training through a wide reading of authorities in science, social science, and literature proper in Latin, Greek, Hebrew, Chaldee, and Arabic.
4. The *method* is informal, every hour to make its contribution; *e.g.*, at table, a discussion of comestibles followed by the consultation of authorities to clear up doubtful points; in the evening, a study of the stars to vitalize the reading of astronomical authors; during the after-dinner hour a game of cards as a means to the mastery of number.

B. **Milton, a Seventeenth Century Exponent.**—The English Puritan and poet in 1644 wrote a *Tractate of Education* at the solicitation of his friend Samuel Hartlib, who was also the close friend of Comenius. On the destructive side, Milton condemns the exist-

ing grammar schools because of the excessive stress on grammatical drill in Latin and Greek, and because of the stress on the writing of compositions in imitation of classical models. On the constructive side

1. The *aim* of education is to fit a man "to perform justly, skilfully, and magnanimously all the offices both private and public of peace and war." Education is hence wider than learning.
2. The *organization* is in terms of an Academy (boarding-school) covering the period between 12 and 21. All specialization is to follow after this foundation has been laid.
3. The *content* is encyclopedic; Milton overestimated the capacity of the human mind for knowledge. Physical education is for military purposes chiefly. In true Puritan style Milton allows no time during the day for free play or competitive athletics. Moral and religious education through the atmosphere of the academy and through earnest study of ethical writings of the ancients and of the Bible. Intellectual education through an encyclopedic program made up of books in Latin, Greek, Hebrew, Chaldee, Syriac, and Italian and covering the sciences, social sciences, and mathematics. It is significant that Milton, the greatest classicist of the seventeenth century, regards no education as complete unless it includes a wide acquaintance with scientific writings.
4. Features of *method* were first, that this bookish education should be followed by travel in England and abroad; second, that authorities on architecture, fortification, agriculture, etc., should be brought to the academy to speak to the boys on these matters, thus vitalizing the book

study; third, that the classical writers should be studied for content, and not for exercises in applied syntax and grammar.

IV. Social Realism.—The chief characteristics of this phase of Realism were:

1. A protest against the schools which had come down from the Renaissance (grammar schools in England, collèges in France, etc.) as unfitted to prepare practical men of the modern world.
2. A demand for the cultivation of the practical judgment as against the memory.
3. A concern for the training of the upper classes to the neglect of other classes in European society.
4. A demand for more attention to new subjects and less to Latin and Greek. Latin, however, was to be retained as indispensable to the education of a gentleman, while Greek might go as belonging rather to the equipment of a scholar.

A. Montaigne, a Sixteenth Century Exponent.—Aristocrat, member of the French Parlement, twice mayor of Bordeaux, essayist, "admirable gossip" (Emerson). His educational views can be garnered from two of his essays: (1) *On Pedantry*, and (2) *On the Education of Children*. On the destructive side, Montaigne assails the amount of time given in French schools (collèges, Jesuit schools) to narrow humanism with its appeal to memory and neglect of physical training, French, and subjects designed to prepare for upper-class living.

1. The *aim* of education should be the training of a man of the world. This aim included first, physical development with a suggestion of the "hardening process" (Rousseau and Locke later); second, moral training which to Mon-

taigne meant a pragmatic utilitarianism, including among other things the capacity to get drunk gracefully; third, intellectual training, which meant chiefly the development of a sound practical judgment of men and affairs.

2. The *organization* should be tutorial and the choice of a proper tutor is the most important and difficult duty of an upper-class parent.
3. The *content* is featured by the inclusion of Latin, the retention—but much reduced—of Greek, and the addition of such subjects as French, contemporary foreign languages, and philosophy (study of man's offices and duties).
4. The *method* is to appeal throughout to judgment and understanding and to strengthen the ability to use facts learned. For example, Latin is to be learned by speaking it, the languages of neighboring countries by traveling through them and conversing with the people, philosophy by giving the substance of what has been read and by expanding it, not by verbatim recitation.

V. Sense Realism.—This movement in education was the outgrowth of the scientific revival of the late sixteenth and of the seventeenth centuries. About it cluster such names as those of Copernicus, Kepler, Galileo on the side of concrete discovery, and of Bacon, Descartes, and Locke on the side of method. The Renaissance schools were soon felt to be out of touch with this new field of human interest, and there came a demand for a modification of them, and that failing, for new types of schools in which the scientific content and method could be exploited.

A. The chief characteristics of Sense Realism were:

1. The belief that the laws underlying sound edu-

cation can be discovered and formulated; hence study children and train teachers.

2. Knowledge comes through the senses; hence train in sense perception and let the order of education be "things, thoughts, words."
3. The method of induction can and should be applied to teaching. In the first flush of enthusiasm of the movement it was hoped that when all knowledge was organized under inductive generalizations it would be attainable by everybody (pansophism).
4. Emphasis on the vernacular as against Latin; one phase of the principle of proceeding through the known to the unknown.

B. Mulcaster (Sixteenth Century) and Sense Realism.—Tutor to the poet Edmund Spenser, headmaster at Merchant Taylors' and at St. Paul's (Renaissance schools). His educational ideas were set forth in English in (1) *Positions*, 1581, and (2) *Elementarie*, 1582. His chief principles, with an indication of his relation to sense realism follow:

1. Children should be studied and their "ingenerate" abilities respected. Teachers, even of elementary schools, should be carefully trained for their work. First characteristic of sense realism.
2. The vernacular (English) should be given a conspicuous place in the schools, both as a subject of study and as the medium of instruction. Fourth characteristic of sense realism.
3. Drawing and music (along with reading and writing English) should enter into the education of all. This is as far as he goes in the direction of sense training. He makes no provision for a study of natural phenomena. Hence the second characteristic of sense realism and the one from

which it derives its name is not found in Mulcaster's theory.

C. **Bacon (Seventeenth Century), the Philosophic Exponent of Sense Realism.**—Political official, scientist, philosopher, writer in both English and Latin. Working entirely outside the schools, Bacon touched on the theme of education in his works.

1. *Advancement of Learning* (1605).—Like Mulcaster, he advocated university training for teachers. In this book he also commends the Jesuits as the best schoolmasters of his day.
2. *New Atlantis*.—An unfinished utopia. Beatitude has been achieved by the inhabitants of an island of blessedness in the Atlantic chiefly through
 - a. The study of natural phenomena.
 - b. The encouragement and furtherance of this study by a central clearing-house of scientific research, Solomon's House.
 - c. The application of the results of such research to the advancement of human welfare.
3. *Novum Organum* (1620).—A book in which the Baconian method of getting at truth is expounded. Points to be noted here are:
 - a. Bacon did not invent the inductive method any more than he invented the human mind.
 - b. He did state the conditions under which inductive reasoning should proceed: removal of all prejudgments (idols), careful tabulation of positive cases, study of negative instances as a check (vs. Aristotle who omitted this step), generalization.
 - c. He allowed no place to the hypothesis and died rejecting the Copernican theory.
 - d. He concerned himself with the logical problem of discovering and classifying knowledge

under inductive heads, not with the psychological problem of presenting this knowledge to the learning mind.

D. **Ratke, a Seventeenth Century Exponent of Sense Realism.**—German popularizer of scientific method applied to actual teaching work. Conducted unsuccessful experimental schools in various German cities and summarized his theory in the book *Methodus Nova*. His pioneer position is seen in the educational principles he advocated.

1. Education should follow the order of nature.
2. Mother tongue to be used for all instruction; other languages to be approached through it.
3. No learning by heart; much questioning and understanding.
4. Knowledge of things to precede words about things.

E. **Comenius, a Seventeenth Century Exponent of Sense Realism.**—Moravian bishop, pansophic philosopher, educational practitioner, theorist, and textbook writer.

1. *Moravian bishop.*—Christian stress on happiness in the next world; Protestant stress on universal education; democratic insistence upon education as a natural right of every man.
2. *Pansophic philosopher.*—Influenced by Bacon and others, Comenius over-rated the capacity of the mind for knowledge, this shows plainly in his textbooks. It did lead, however, to the inclusion of a wide range of scientific material in his curriculum.
3. *Theorist.*—A comprehensive educational philosophy is given in his *Great Didactic* (1632 in Czech, 1657 in Latin). It may be summarized as follows:

- a. The *ultimate aim* of education is eternal happiness with God. The more *immediate aims* are knowledge; virtue, and piety. Knowledge of the world and man, proper disposition towards mankind, proper attitude towards God. The relation between these stamps Comenius as a transition figure—the emphasis on secular knowledge connects him with later educators, the stress on piety with the long line of religious thinkers who preceded him.
- b. The *organization* was on the ladder plan, each school leading to the next. In this respect Comenius was a genuine prophet of democracy. The organization may be represented as follows:

School	Age Limits	Location	Attended by
School of Mother's Knee	To 6	Every Home	All Children
Vernacular School	6 to 12	Every Hamlet	All Children
Latin School	12 to 18	Every City	Those who aspire higher than the workshop
University	18 to 24	Every Province	Those who pass a rigid examination
College of Light	24 on	Somewhere in the World	Learned men from all nations

Public support is assumed throughout and the education of women is to be taken care of in the lower schools.

- c. The *content* in the School of the Mother's Knee is to be drawn from all the fields of the child's interest—the interest in things, in manipulation, in language, in God, in other people, etc. In the Vernacular and Latin schools the same interests are to be exploited.

(*e.g.*, the interest in things calls for the study of natural phenomena, in language for the study of the vernacular and then of Latin through the vernacular, in people for the study of literature and history). The principle of curriculum organization is thus that of concentric circles, each school carrying farther the studies begun in the school below (vs. the Rousselian principle of delayed maturing, see page 143). Special study in a selected field is postponed until the university period.

d. The *method* outlined by Comenius embodied the following features:

1. *Education should be according to nature.* This is the underlying principle. Analogies from nature are adduced and educational principles drawn therefrom. In spite of this unscientific method, Comenius arrived at some important educational truths, *e.g.*, abstract studies in the morning hours, subjects utilizing the hand and voice in the afternoon hours.
2. *Education should appeal to the child's interests.* For this a knowledge of children, sanitary and attractive schoolrooms, and good textbooks are necessary.
3. *Maximum sense appeal should be made.* This led directly to the illustrated textbook.
4. *Maxims, commonplace to-day, were formulated.* For example, from the known to the unknown, from the concrete to the abstract, from the particular to the general (induction), etc.

- ## VI. Institutional Reflections of the Realistic Movement.

—This protest from outside the schools, combined with religious factors (as in England), or social and economic factors (as in France and Germany), led to new

types of schools. This development may be represented as follows:

PHASE OF MOVEMENT	NEW SCHOOL	CONCURRENT FACTORS	COUNTRY
Verbal Realism	Academy	Exclusion of non-conformists from universities and grammar schools, 1662 Demand for non-classical secondary school not looking towards college entrance, 1751	England
	Academy		America
Social Realism	Académie	Demand of French aristocracy for a school which would turn out a "gentleman" as distinguished from a "pedant"	France
	Ritterakademie	Rift between aristocracy and bourgeoisie as a result of Thirty Years' War. Refusal of former to attend Gymnasium (1650-1800). Also influence of French court life in the Germanies	Germanies
	Private Tutor	Withdrawal of the sons of upper-class families from the Grammar Schools	England
Sense Realism	Teachers' Seminary First Realschule First modern University (Halle)	Work of the Pietist Francke and development of liberalism in Prussia (c. 1700)	Prussia

A. Notes on Concurrent Factors.

1. **Academies in England.**—These schools came to meet the educational needs of nonconformists driven out of the grammar schools, and were taught chiefly by nonconformist clergy driven from their parishes by the *Act of Uniformity*. They numbered about thirty. Latin, Greek, and Hebrew were prominent, but the innovation consisted of the addition of science, mathematics, and English. The *Act of Toleration* (1689) permitted the regular incorporation of these schools.
2. **Academies in America.**—The Renaissance Latin Grammar School (limited to boys, college-preparatory, narrowly humanistic, intensely sectarian, town-supported) failed to meet the needs of the American states after the Revolutionary War. The first secondary school of the

Academy type was opened by Franklin in Philadelphia (1751). By the time of the Public School Revival (1835), these were the main secondary schools of America. Their chief features were:

- a. They were usually open to girls as well as boys.
 - b. They were private, although some succeeded in getting a measure of public support.
 - c. Their curriculum was broad; modern languages, the sciences, mathematics, history, English grammar and composition all found a place.
 - d. They were the chief source of supply of teachers for the lower schools until the growth of public normal schools (1838 on).
3. **Courtly Academies in France.**—There were twelve of these in Paris alone in 1649. They came in response to the upper-class demand for a school to train "gentlemen." They supplanted the classics and religion of the Jesuit schools and Renaissance collèges by mathematics, modern languages, "good form," military arts (fencing, riding, etc.), and fortification.
4. **Ritterakademien in the Germanies.**—The Thirty Years' War (1618-1648) had ruined the cities and the burgher class in German lands and had enhanced the prestige of the nobility who filled high places in the army. The separation of these classes socially led to their separation in school. The sons of the nobility withdrew from the Renaissance Gymnasien and attended schools exclusively for themselves. These schools supplanted the classics and religion of the older schools by French (since all European courts

were aping that of Louis XIV), by other modern languages, mathematics, natural science, history, and politics. In addition, the conventional accomplishments of the *galant-homme* (genealogy, heraldry, and the chivalric arts of riding, fencing, dancing, etc.) were added. In the nineteenth century the nobility returned to the *Gymnasien* because

- a. The merchant class had recovered its prestige.
- b. German culture had thrown off its subservience to French models.

5. **Private Tutorial Education in England.**—The lack of elasticity in the Renaissance Grammar Schools and the growing belief in the “grand tour” as indispensable in the finishing of a gentleman led to this type of training for the upper-class boys in England.

6. **Pietistic Movement in Prussia.**—Pietism was a protest against dogmatic Lutheranism as Puritanism was a protest against dogmatic Anglicanism. Its chief educational representative was Herman Francke. Beginning in 1695, Francke developed a group of institutions (all deeply religious) at Halle in Prussia, which is still in existence. The fields of education embraced in his comprehensive scheme were

- a. *University Education.*—Francke with others made the new University of Halle the “first modern university.” The innovations were
 - 1. German, not Latin, was the language of the university lecture.
 - 2. Scientific studies were given a place alongside of the old faculties (law, medicine, theology) and of the classical faculty which was added during the Renaissance.

3. The principle of academic freedom and research was made operative, especially in the previously closely guarded faculty of philosophy. Other universities followed and German university education received the bent it has since retained.
- b. *Teacher Training*.—Francke established a Seminary in which the university students who taught in his lower schools might be trained.
1. This Seminary marked the first appearance of the teacher-training idea in Protestant countries (cf. Christian Brothers and Jesuits).
 2. It included the practice school element as well as theoretical training (cf. Christian Brothers).
- c. *New Type of Secondary School, the Realschule*.—One of Francke's institutions was a secondary school for upper-class boys (*Pädagogium*), in which the Latin, Greek, and Hebrew of the Gymnasium ran parallel with French, German, and scientific studies. This was followed by a secondary school (*Realschule*) in which the classics received little stress and in which the pure and applied sciences dominated. The transition was complete when a Realschule was opened in Berlin by one of Francke's teachers. This type has spread throughout the German states and is to-day a non-Latin, non-Greek, scientific secondary school of six years.
- d. *Other Features of Francke's Work*.
1. The principle that the social classes should be segregated in the schools. He

founded an elementary school for poor boys and one for upper-class boys; a secondary school for poor boys and one for upper-class boys.

2. Provision for the education of girls. He founded an elementary school for poor girls and one for upper-class girls. A striking feature was the establishment of a secondary school for girls of position.
3. Enrichment of the curriculum. His elementary schools added natural phenomena study to the volksschule subjects, and while still emphasizing religion, got away from catechism drill. His secondary schools added new studies also (see description of Pädagogium and Real-schule above).

QUESTIONS

(1) Give a brief analysis of Milton's Tractate on Education. Criticize Milton's scheme.

(2) Who founded the institutions at Halle? Of what do these institutions consist?

(3) What new principles in education were embodied in the textbooks of Comenius?

(4) Contrast Humanism with Realism. Name a leader of each movement. Show whether the attitude to-day is toward Humanism or toward Realism.

(5) Describe the Didactica Magna of Comenius as to (a) educational doctrines, (b) principles of teaching.

(6) (a) State and account for Francis Bacon's influence in the intellectual history of mankind. (b) Give two points in his doctrine that have been of great consequence in education.

(7) Give the origin of the Real School of Germany and explain the nature of its work.

(8) Define Realism. Name one of its prominent advocates and tell something of his work.

CHAPTER XIV

JOHN LOCKE (1632-1704), ECLECTIC

- I. Fields of Activity.**—The English Puritan Locke is an important figure in human history
- a.* In philosophy (*Essay Concerning the Human Understanding*) in which with others he worked out the psychological basis of the scientific and rationalistic movements of the seventeenth and eighteenth centuries.
 - b.* In political theory (*Treatises on Government*) in which he justified the Whig movement and the "bloodless revolution" which gave England a constitutional monarchy, 1688.
 - c.* In religion where he stood for toleration and the removal of disabilities based on nonconformist beliefs. Locke, however, did not include the Roman Catholics in his concept of toleration.
 - d.* In education where he occupies an eclectic position when his two works *Thoughts Concerning Education* and *Conduct of the Understanding* are studied together. The first was written for an English gentleman and deals with the field of upper-class education; the second is a work on psychology.
- II. Relation to Other Movements.**—Locke is an educational thinker in whom many currents mingle. This eclecticism may be represented by the following analysis:

HUMANISTIC REALISM

POINTS OF LIKENESS

Attack on narrowly humanistic ideal in existing schools. Education broader than instruction. An encyclopedic content for the young gentleman.

POINTS OF DIFFERENCE

Free from the bookishness of humanistic realism. Latin less stressed. Greek omitted as necessary to a scholar but not to a gentlemen.

SOCIAL REALISM

Distrust of existing schools; recommendation of tutorial system for the training of a gentleman. Learning less important than physical and social training. Stressed travel. Latin by the conversational method; Greek not necessary. Hardening process in physical education. In physical education, Locke had an influence on the Grammar and Public Schools of England.

The chief difference lies in the meaning attached to the moral aspect of the gentleman's training. With Locke the aim here is self-denial, a discipline of the desires. With Montaigne sanction is given to types of indulgence through a pragmatic respect for versatility.

SENSE REALISM

Psychological doctrine that sense impression is the beginning of clear ideas. Encyclopedic content. Methods to be pleasant, making use of play devices, *e.g.*, teaching to spell by throwing lettered dice.

Underestimate by Locke of instincts and other innate tendencies of the child (*tabula rasa* doctrine) makes his psychology less satisfactory than that of most of the sense realists. Locke "sounds the death-knell of pansophism" for knowledge is not the objective in his broad content.

DISCIPLINARY CONCEPTION

Locke stands for the belief, at least as old as Plato, that mental power is more important than knowledge acquired

He did not stand for a narrow curriculum as some disciplinarians do—apparently on the theory that a few well-organized

through study; thus mathematics makes "reasonable creatures," reading develops "discrimination." He believes mental power thus developed "able to transfer to other parts of knowledge."

studies in which the technique of method has been perfected are sufficient. He did not use the theory to support the place of Latin in the curriculum.

RATIONALISM

Reason the chief "faculty" to be developed.

Locke never renounced his Christianity; in this he differs markedly from the *illuminati* of the eighteenth century.

III. Summary Statement of Locke's Positions.

A. The complete *aim* of education is fourfold—virtue, worldly wisdom, breeding, learning. Another statement is in terms of the three major fields:

1. Physical education, where the aim is body hardening (influence on Rousseau later).
2. Moral education, where the aim is learning to control the desires by reason.
3. Intellectual education, where the aim is the development of mental power rather than the acquisition of a wide range of knowledge. A third statement of the aim of education is crystallized in Locke's dictum "a sound mind in a sound body."

B. The *organization* is tutorial; Locke wrote for the upper classes. When he turned to the theme of education for the masses (as he was obliged to as King's Commissioner with oversight over the poor), he thought in terms of the workhouse and trade apprenticeship, a typically British attitude.

C. The *content* is in sharp contrast to the then existing Grammar School curriculum. The Englishman who was to take his place in the active political life of the time could dispense with Greek, needed Latin,

but needed even more, geography, history, civil law, merchants' accounts, dancing, and a trade or two as hobbies.

- D. The *method* should utilize throughout the underlying psychology of the rational vs. the memorative appeal, should exercise sense-perception, should give due care to habit formation, and should proceed inductively.
- E. The *discipline* should consist of praise and blame, the first to be administered in the presence of others, the second privately. But Locke endorses corporal punishment in dealing with obstinacy, the root of many later evils. He states that the father should be severe with the child when he is young, but should take him more into his confidence as he grows older.

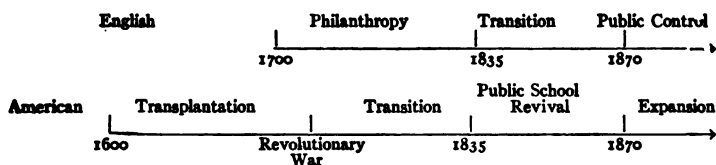
QUESTIONS

- (1) What treatise did Locke write on education? For what immediate purpose? (b) Name two general points on which he laid great stress. (c) Give, with reasons, two of his suggestions which you think unwise. (d) Name a writer on education who was influenced by Locke, and state one respect wherein he was influenced.
- (2) How was the work of John Locke related to that of Francis Bacon?
- (3) What was the title of Locke's most important educational work? What celebrated statement expresses his educational theory?
- (4) State the chief services rendered to education by Locke.

CHAPTER XV

EDUCATION IN AMERICA TO THE PUBLIC SCHOOL REVIVAL

I. **Chronological Graph.**—The main time divisions of American education, with the English background included for orientation, were:



II. **Time divisions in American Education.**—While this chapter deals only with the major developments down to the Public School Revival, the graph presents the later periods as well.

A. *Transplantation Period.*—As the name suggests, this period shows an attempt to reproduce in the new world, both in the Thirteen Colonies and in the French and Spanish possessions, the educational ideals and the schools with which the immigrants were familiar in the old world.

B. *Transition Period.*—This extends from the beginning of national existence to the Revival. It is filled with the struggle between the new republican ideal of tax-supported schools for training citizens and other ideals, some of them a survival from the first period.

C. *Public School Revival*.—This extends from the accession of Horace Mann as Secretary of the State Board in Massachusetts (1837) to about 1870, when the influence of the reforms there effected along with other factors had overcome most of the obstacles which had thwarted progress in the Transition Period.

D. *Period of Expansion*.—From 1870 down, during which time the extension of educational facilities to more people and through new agencies are the dominant notes.

III. **English Background**.—For completeness the three big periods in English education since 1700 are represented.

1. The period of inactivity of the state, during which private philanthropy provided what education there was for the masses.
2. The period of transition, during which the government was spending some money, but through private societies as channels.
3. The period of public control, beginning with the Forster Act (1870), which established state supported schools. Other acts have since been passed, the latest in August, 1918, to make educational opportunities more abundant and more accessible to the English people. In this chapter only the Philanthropic Period will be considered. During it four streams of influence came over to America.
 - a. The schools of the charity type.
 - b. The Sunday schools.
 - c. The monitorial schools.
 - d. The infant schools.

IV. **Education During the Transplantation Period**.—

This may be considered under two heads:

A. *In French and Spanish Possessions*.—Educational facilities were offered in this part of the present

United States by the conventual orders of men and women who labored among both the Indians and the European settlers. Among the earliest were the schools of the Spanish Franciscans in Florida and New Mexico, which were carrying on elementary work as early as 1629.

B. *In the Thirteen Colonies.*—These were settled at a time when religious zeal and intolerance were rampant in Europe as the aftermath of the Lutheran, Calvinistic, and Anglican Revolts and the Catholic Reaction. For educational purposes, the following groupings should be noted:

1. The *southern* colonies, settled largely by Anglicans, save Maryland, which was Catholic.
2. The *middle* colonies, settled largely by Calvinistic and Lutheran groups.
3. The *New England* colonies, settled by intolerant Calvinistic Puritans, save Rhode Island, where the principle of religious freedom was established from the start.

C. *Education in the Southern Colonies, Virginia the Type.*—The prevailing idea here was **selective**, the upper class providing education for its children, the children of the poor and orphans being cared for through apprenticeship. Since the Anglican settlers had come to the new world for gain and not for religious freedom, there was no Reformation insistence on the importance of everybody being able to read the Bible. The main developments of the period, all in the interests of the ruling class, were:

1. *Elementary education* under tutors or in private schools, sometimes "field schools" jointly supported by a group of neighboring planters.
2. *Secondary education* in private Latin Grammar Schools.

3. *Higher education* (chiefly for the ministry) at first by study in England and then in the College of William and Mary, founded 1692.
- D. *Education in the Middle Colonies, New Netherland, Maryland, and Pennsylvania the Types*.—The prevailing ideal here was **parochial**, in terms of an elementary school connected with each church, so that religious training might be available for all. An attempt was also made to provide more advanced schools.
 1. In New Netherland (Dutch Reformed) the schools were a combination of public and parochial, pay and free. The civil authorities (Dutch West India Company) divided the administration of the schools with the religious authorities (Dutch Reformed Church). Poor children were admitted free, others paid fees. There is record of one Latin Grammar School under Dutch rule. Under the English occupation, 1664 to the Revolutionary War, the selective attitude described for Virginia set in; the higher institution for training Anglican ministers was Kings' College (Columbia), founded 1754.
 2. In Maryland (Catholic) the schools were purely parochial, no public support principle operating. This had been the theoretical position of the Catholic Church since the Council of Trent. There is record of one school opened at Newtown by a former Jesuit novice (1640) which was above the elementary grade. An attempt was also made to establish a system of county secondary schools which were to share in certain state funds, but it was largely abortive before the Revolutionary War.
 3. In Pennsylvania (Lutheran, Calvinistic, Catholic,

Quaker) the schools were also purely parochial, the tolerant attitude of the colony leading to a heterogeneity of religions and nationalities. Each church supported its own school, no principle of public support operating. The need for ministers led to the founding of secondary and higher institutions by some of the sects, and the first secondary institution of the realistic type (the academy) was founded through Franklin's efforts in 1751—now the University of Pennsylvania.

E. *Education in the New England Colonies, Massachusetts the Type.*—The prevailing idea here was **government control** of education. The factors which entered into this ideal were first, a spirit of intolerance which kept other religionists out of the colony and thus greatly simplified the educational problem; second, a splendid spirit of democracy which prevented sharp class stratification from developing; third, a Calvinistic emphasis on Church-state cooperation and on the importance of all being able to read and understand the Scriptures. The main developments during the first part of the period were:

1. Elementary schools were made mandatory in each town of fifty families by the Law of 1647. While the schools were to be partly supported by tuition fees, and while attendance was not compulsory in the present-day sense, this law is the germ of our present state systems of common schools.
2. Secondary schools (Latin Grammar) were made mandatory in each town of one hundred families by the same Law of 1647. These were to fit for the colonial college, and the law embodied the

principle, now accepted, that the state must provide at public expense for the higher education of its youth.

3. Higher education was provided by Harvard College, founded in 1636, largely for the training of Congregational ministers.
4. The Massachusetts government action attitude influenced Maine, New Hampshire, and Vermont (all parts of Massachusetts colony), and Connecticut. Rhode Island was not affected, owing to a fanatical devotion to individual liberty and a broadly tolerant religious attitude.
5. In the latter part of the colonial period, 1700 down, a distinct decline set in throughout New England, but this is best considered in connection with the Transition Period.

V. Education During the Transition Period.—This covers the period between the Revolutionary War and the Public School Revival. It is featured by the constitutional guarantee of religious freedom for all, the admission of new states, the spread of the population inland, and the extension of manhood suffrage. Education breaks away from European transplantations, becomes more secular, and turns more and more to the objective of preparation for citizenship. Powerful obstacles appeared in the various states; ardent champions of public secular schools attempted to overcome them.

A. Chief Obstacles to Public Secular Education.

1. The granting of public moneys to private schools. Massachusetts, Virginia, and New York illustrate this.
2. The desire of religious people to support only those schools which teach religion. New York illustrates this.

3. The confusion between public education and pauper education. Virginia illustrates this.
 4. The demand of tiny geographical units for educational autonomy. Massachusetts illustrates this.
 5. The unwillingness of those without children or whose children were in private schools to pay public school taxes. Virginia illustrates this.
- B. *Steps in the Direction of Public Secular Education.*
—Virginia, New York, Massachusetts, and the Northwest Territory may serve as indices of the developments in various parts of the country.
1. *Virginia.*—Jefferson (1779) proposed a scheme of universal education based on the theory that a modicum of education for all and special advanced education, including college training for the most capable, should be offered at public cost. The tangible outcome was
 - a. The establishment of the University of Virginia, 1820.
 - b. The establishment of a state fund to subsidize education.
 - c. The spending of this fund to pay the tuition of pauper children at private schools in each county.
 2. *New York State.*
 - a. Founding of the first state board in the country (Board of Regents, University of the State of New York) to coordinate all secondary and higher educational activities, 1787.
 - b. Establishment of a state fund to subsidize education, provided the smaller geographical units would match their share by taxation.
 - c. Appointment of the first state officer in the

country (state superintendent) exclusively concerned with education. This office, however, was abolished before the end of the Transition Period.

- d.* Spending of state money through private agencies, academies in the secondary field, Public School Societies in the elementary field.
- e.* Establishment in New York City of a public city board of education. The steps leading to this were
 - 1. Founding in 1805 of the Free School Society (later the Public School Society) which opened a number of elementary schools, Protestant in spirit.
 - 2. This society given a small local tax and a share in the state fund described in (*b*) above.
 - 3. Increase in Irish immigration injected a new element into what had been a Protestant problem.
 - 4. Catholics challenged the right of the Public School Society to alone share in public funds.
 - 5. Of the alternatives before it, the state legislature chose that of withdrawing public money from the Public School Society and establishing a City Board of Education, 1842.
- 3. *Massachusetts.*—The Transition Period was in reality here a period of decline from the government-action attitude represented in the Law of 1647. The chief causes for this decline, which began long before the Revolutionary War, were

- a. A growing spirit of tolerance. This broke up the homogeneity of religious belief which had made the maintenance of town schools a relatively easy matter.
 - b. The spread of the population away from the town church, school, and block-house. This made it difficult for many to share in the education they were helping to support.
 - c. The resultant demand first, for the "moving school," then for the district school.
 - d. The granting of much power to local district committeemen, thus creating an army of petty politicians and decentralizing the educational machinery.
 - e. Decay of the Latin Grammar School through lack of support; concomitant growth of private academies which often received state subsidies.
4. *The New Northwest Territory.*—This land, from which Ohio, Indiana, Illinois, and Michigan were erected as republican states during the Transition Period, was ceded to the new federal government in 1781. It was settled by westward-moving groups from the original states, the northern stretches by those from New England and New York, the southern stretches by those from the southern states. There was the same conflict between proponents of public secular schools and the "obstacles" as in the older states. The key to the later educational history may be presented as follows:
- a. The Northwest Territory was divided by Congress into townships (geometrical divisions 36 square miles in area), and each

township into sections (one square mile). This land was then sold to the settlers.

- b.* When Ohio was admitted in 1802 a compromise was effected: if the state would exempt federal lands from taxation until sold, the federal government would give Ohio the sixteenth section of each township to maintain its common schools. Another federal grant consisted of two whole townships for the support of a state university.
- c.* With a few exceptions, these grants were made to all states later admitted to the Union. The old states have not enjoyed either of these federal grants.

VI. *Infiltration of English Influence During the Late Transplantation and Transition Periods.*—On the line of English education (see graph, page 57) this stretch is called the Period of Philanthropy. The backwardness of the British state in education may be explained in terms of

- a.* Failure of the Anglican Revolt to stress education of the masses.
 - b.* Mutual intolerance of Anglicans and nonconformists during the seventeenth century. Catholic education was "felonious" from both the Anglican and nonconformist viewpoints.
 - c.* Deep-rooted British conviction that education is the duty of the parent and of the Church, not of the state.
 - d.* Fear of the ruling class that education of the masses would make them dissatisfied and restive.
- A. Motives for Philanthropic Endeavor.**—The early eighteenth century movements show the religious motive predominant. Towards the end of the century the terrible conditions resulting from the me-

chanization of industry and the exploitation of child labor served as a challenge to humanitarians and social reformers. As the end of the period (1835) approached, the motive became increasingly civic. Dissatisfaction with philanthropic efforts and a plea for a public school system had been voiced by Adam Smith (*Wealth of Nations*, 1776), by Malthus (*Essay on Population*, 1798), and by Thomas Paine (*Rights of Man*, 1792). The chief philanthropic movements, with the carry-over of each to America, were

1. *Religious Charity Schools*.—(a) Anglican schools founded by the S. P. C. K. (Society for the Promotion of Christian Knowledge) about 1700, in which poor children were taught free. The content consisted of the rudiments, cleanliness, behavior, and Anglican religious principles. For the times, the teachers were of high character and efficiency. (b) Dissenting groups of charity schools founded by Quakers, Presbyterians, etc., also the "circulating" schools in Wales.

a. Carry-over to America.—The colonial offshoot of the S. P. C. K. was the S. P. G. (Society for the Propagation of the Gospel). This organization opened schools supported by money raised in England. It worked in all colonies save Virginia; especially active in New York, where it helped fill the gap created by the British laissez-faire policy after 1664. Withdrew after the Revolutionary War.

2. *Sunday Schools*.—These arose in industrial centers in England (*e.g.*, Raikes' work at Gloucester, 1780) as a means of giving instruction in the rudiments and non-sectarian religion on Sundays to children who worked all week. The work be-

came crystallized in the Sunday School Society and remained until improved working conditions removed the causes which had brought it into being.

- a.* Carry-over to America.—The idea appeared first in Virginia (1784), spread through the other southern states sometimes leading to special schools for African children, touched New York and then Rhode Island. As in England, it was taken up first by philanthropic Sunday School Societies, then by the churches. As weekday instruction became available, the Sunday schools passed over to a sectarian basis and their teachers ceased to be paid.
3. *Monitorial Schools*.—The underlying idea in these was that bright pupils could be utilized as assistant teachers, thus greatly reducing the cost of education and making it possible to reach large numbers. There were two parallel developments of the idea in England: (*a*) the work of Joseph Lancaster leading to nonsectarian monitorial schools under the control of the British and Foreign Society, (*b*) the work of Andrew Bell leading to Anglican monitorial schools under the control of the National Society. While these schools were mechanical in method and narrow in content, they served to bridge the gap between public neglect of education and public control because: (*a*) they showed what could be done even with one good teacher for 400 or 500 pupils, (*b*) they served as channels through which the first state money was disbursed for the education of the masses in England (1833), the subsidy which ushered in the

Transition Period, (*c*) they trained teachers at a time when no other agency was doing it, (*d*) they systematized what had been attempted in a desultory way by the charity schools, Sunday schools, etc. Their position in the chain of development of the dual system of schools erected by the Law of 1870 (see graph, page 177) is as follows:

	1700-1800	1800-1870	1870
Sectarian Schools	S. P. C. K. Schools	Schools of National Society (Bell)	"Voluntary" schools Buildings owned by churches
Non-sectarian Schools	Charity schools of non-sectarian kind	Schools of British and Foreign Society (Lancaster)	"Board" schools Buildings owned by boards of education

- a.* Carry-over to America.—Only the Lancasterian influence came to America (1806). The Public School Society in New York City (see page 64) put its schools on the monitorial basis. Records show that the system was put into practice as far south as Georgia, as far west as Ohio, that the Mexican state of Texas organized higher schools on this basis, that state systems were proposed (Maryland, North Carolina, Indiana), and that high schools as well as elementary and infant schools were actually organized on the monitorial principle. While superseded everywhere later by the theory of education as individual development rather than the imposition of adult standards on little children to be achieved through ceaseless mechanical drill, yet this influence helped the growth of public secular education in America.

1. By proving the advantages of education for the masses of the people.
 2. By acquainting Americans with the idea of the graded school. It was possible for a child to take his reading with one group, his arithmetic with another, and his spelling with a third. Such flexibility had been impossible in the ungraded one-room school.
 3. By accustoming the American people to the principle that common schools contribute to the general public welfare and hence should be supported by general taxation. When the people were ready for taxes commensurate with the needs of universal democratic education, these schools gave way before Pestalozzian schools (see page 83).
 4. By dignifying the work of the teacher through providing teacher training. These monitorial schools served as a nexus between (a) the conception of the elementary school teacher as a sexton, gravedigger, army veteran, indentured servant, or housewife with a large room and spare time, and (b) the conception of the elementary school teacher as one carefully trained in a normal school for a dignified vocation.
4. *Infant Schools*.—This type of education for very little children (those too young for the elementary schools) passed through three stages in Europe, all antedating its philosophic foundation by the German, Froebel. These stages were (a) the work of the Lutheran minister Oberlin,

about 1770 in France; the infant schools founded by him were to inculcate morality and religion, to teach the rudiments, and to allow the play and manipulative instincts ample scope; (b) the work of the free-thinker and Socialist factory-owner Owen in Scotland, born of a desire to ameliorate the terrible evils of child-labor; the infant school founded by him aimed to allow free development of young children as did that of Oberlin, save that religion found no place; (c) the work of Wilderspin in England; the infant schools founded by him and by the Infant School Society which exploited his ideas were really elementary schools for very young children; books, facts, and drill were their features.

a. Carry-over to America.—The need for infant schools was created by the fact that elementary schools in some places made no provision for beginners, children being admitted at about eight years of age. First in Boston (1818), then in New York (1827), and in other American cities the infant school was established as a separate institution, later being merged as the primary department with the elementary school to form the "grammar school." The American kindergarten, therefore, was not a transplantation of the European infant school, but an independent development. Some important results of the infant school in America were

1. The development of a better type of schoolroom
2. The disappearance in New England of the dame school, the functions of which were absorbed by the infant school.

3. The introduction of women teachers into American schools.

- b. Graphic Summary of Movements for the Education of Very Little Children.—With movements to be described later included for completeness, this may be presented as follows:

Country	School	Date	Leaders	Place To-day
France	Infant School	1770	Oberlin	École Maternelle for children between 2 and 6 years
England	Infant School	1816-20	Owen Wilderspin	Infant School for children between 3 and 7 years
America	Primary School, Junior Department	1818 to 1830	"Public School" Societies, Baux	Primary department of elementary school for children between 6 and 10
America	Kindergarten	1860 1873	Elizabeth Peabody William T. Harris Susan Blow	Kindergarten for children 4 or 5 years old
Germany	Kindergarten	1837	Froebel Baroness von Marenholtz-Bälow	Not a corporate part of the educational system

QUESTIONS

(1) Compare the early schools of New England with those of New York.

(2) Mention in chronological order five important events in the educational history of the state (New York).

(3) What educational influences of Europe were prominent in the early schools of New England and New York?

(4) Show how the change of New York from a Dutch to an English colony affected its schools.

(5) What conditions created the need for philanthropic endeavor in English education in the eighteenth and early nineteenth centuries?

(6) Why is Thomas Jefferson given a place in the history of education in America?

(7) What part have the national land grants played in the development of state systems in the newer states?

CHAPTER XVI

THE NATURALISTIC MOVEMENT IN EDUCATION

I. Political and Social Background of the Movement.—

The eighteenth century in the chief countries of Europe may be characterized as follows:

- A. England.**—Alone among the nations of western Europe, England had achieved limited (constitutional) monarchy through the Bill of Rights, 1689. This, however, was a victory for Parliament, not for the common people. The Act of Toleration, 1689, removed legal obstacles against the Dissenters, but did not lift the ban from Roman Catholics.
- B. Prussia, Austria, Russia, and Spain.**—This is the period of the benevolent despots (1) Frederick William I, Frederick the Great, Frederick William II in Prussia, (2) Maria Theresa and Joseph II in Austria, (3) Peter the Great and Catherine in Russia, (4) Philip V, Ferdinand VI, and Charles III in Spain. Legislative assemblies rarely met in these countries; the rulers governed autocratically. But there was an earnest attempt to improve the masses in the interest of nationalistic ambitions. "Everything for the people, but nothing by the people."
- C. France.**—Absolute monarchy (Louis XIV, Louis XV, Louis XVI), shorn of the benevolent interest in the masses of the people, reached its zenith here. A magnificent court, graced by sycophants and idlers, rested upon an impoverished, over-taxed, neglected population.

1. The first revolt was *aristocratic*, aimed at the political theory of absolutism and the whole structure of Christianity, but was callous to the needs of the peasants and workers. This was the Illumination, and in it participated Voltaire, Diderot, Montesquieu, etc.
 2. The second revolt was *democratic*, and assailed at once the aristocracy of blood and the equally heartless aristocracy of intellect. This was the Naturalistic Movement, and its central figure was Rousseau. The specific targets of his exaggerated attacks were
 - a. The upper-class training of children, especially the treatment of children as mannikins, the repression of spontaneity, the cramped life of the cities with the hot-housing of children, the artificialities which were the dancing-master's stock-in-trade, the absence of home-life and the relegation of children to ignorant nurses.
 - b. The contempt of the upper classes for the workers, and the insincerity developed in children through too early knowledge of religious and moral conventions. *Émile* is an upper-class boy because "the poor man has no need of an education," *i.e.*, he is close to nature, which saves him from the false training above described.
- II. **Rousseau (1712-1778), Naturalist.**—Born at Geneva, enjoyed very little schooling, apprenticed to a trade, lived as a vagabond, had close contact with rural nature and with the peasant classes, lived dissolutely—these were the antecedents of his first publication, 1750. His writings touch four major fields: (1) political theory—two prize *essays* pleading for a return to primitive liv-

ing, the *Social Contract* interpreting the state as the democratic expression of the popular will; (2) autobiography—the *Confessions*, a remarkable but untrustworthy analysis of his own soul; (3) romantic literature—the *New Heloïse*, an idealization of romantic love and of simple domestic rural life; (4) education—the *Émile*, a plea for the rights of the child. This was published in 1762, about the time when the Jesuits were driven from France. It attracted hostile attention from Catholic and Protestant thinkers, but was widely read. The book may be analyzed as follows:

A. **General Character.**—It abounds in exaggerations (*e.g.*, by doing the opposite of what is usual, educators will almost always be right), contradictions (*e.g.*, all sides of the child's nature are to be developed, yet the social instinct is given no chance for expression before fifteen years of age), and faulty psychology (*e.g.*, the neglect of self-development for Sophie because she is a woman, the categorical denunciation of emulation). Its real value is to be found in specific suggestions scattered here and there rather than in the main postulates. Placed in its own setting—eighteenth century France—the weaknesses of his doctrine are at the same time its strong points. For example:

1. Books are neglected, but observation, inference, and experimentation are stressed.
2. Nurture (preparation to meet social demands) is neglected, but nature (meeting the demands which come from the child) is stressed.
3. Age divisions are entirely too sharply drawn, but age divisions are drawn.
4. Knowledge of child psychology is often faulty, but importance of studying children and of

teaching the child rather than the subject or the book are stressed.

B. Divisions of the Book.—These, with the outstanding educational recommendations in each, are

1. From Birth to 5—Since “everything is good as it comes from the hands of the Author of Nature,” the underlying principle is Negative Education (*laissez-faire*, “hands off”). *Physically*, this meant that babies should be nursed by their own mothers, that walking should be learned without artificial devices, that medicines and doctors should be proscribed, that clothing should be loose and comfortable, that the body should be hardened (cf. Locke, Montaigne) and not hot-housed, and that the environment should be rural. *Morally*, this meant that rational discipline should be tabooed, the “natural consequences” of the child’s acts serving to inhibit some and cause the repetition of others; for the same reason history, fables, etc., have no place because they demand moral judgments of which the unmoral child is incapable. *Intellectually*, this meant no books, no three R’s (because dealing with artificial symbols), but the informal exercise of the senses and of the muscles, and speech development without affectation nor the use of words meaningless to the child.

2. From 5 to 12—Negative education still the guiding principle. Sense discrimination (weighing, measuring, singing) gets a large place. Simple problems in constructive geometry, where areas are superposed, to be used to exercise reasoning. *Émile* is alone with his tutor; hence moral training through group contacts can not operate. Emulation, save with his own past achievements, is impossible. Books have no place. Drawing

should permit free expression of the child's ideas (vs. Pestalozzi later).

3. From 12 to 15—Here Rousseau comes nearest to positive instruction. The work in this period includes geography, in which the beginnings are found in neighborhood study (cf. Pestalozzi and modern practice), natural sciences, in which the child makes his own apparatus, reading with Robinson Crusoe as text. Émile, though an upper-class boy, learns a trade because (a) this and not history is the best preparation for understanding social relationships (Dewey's position to-day), (b) this will raise him above parasitism, (c) this will overcome the tendency to despise those who work with their hands.

4. From 15 to 20.—Since Émile has reached—in this process of delayed maturing—the stage of altruism and interest in his fellowmen, he is to be socialized through (a) the study of history, (b) visits to workshops, prisons, hospitals, where human beings in all conditions are grouped, (c) participation in play groups where human character presents other manifestations, (d) a deistic, naturalistic explanation of life, stressing reverence rather than creed and putting Émile in a position to choose one religion for himself.

5. Education of Sophie.—Book V concerns itself with this subject and contains the propositions (a) that woman is constituted to please man, (b) that her education is purely relative to that of man.

C. **Influence of Rousseau.**—Three phases of this many-sided phenomenon are important educationally: (1) it helped give direction to nineteenth century theory, (2) it aroused an interest in education which runs through the activities of the French

Revolution, (3) it inspired the Philanthropic Movement in Germany.

1. *Rousseau and Nineteenth Century Theory.*

- a. The impetus given the Psychological and Child Study movements, typified in the work of Pestalozzi and Froebel.
- b. The impetus given the Democratic and Secularizing movements, typified in the work of all who stand for a widely disseminated education, trade-training, the leveling of class distinctions, and the attempt to develop moral character without the use of religious sanctions.
- c. The impetus given to the Scientific movement, typified by Spencer, Huxley, etc. This phase of Rousseau's influence may be regarded as a revival of sense realism in education simultaneous with the scientific inventions and discoveries of the nineteenth century.

2. *Rousseau and the Educational Undercurrent of the French Revolution.*

Constituent Assembly	Legislative Assembly	National Convention	Directory	Consulate
1789— Mirabeau— Talleyrand	1791— Condorcet—	1792— Lakanal	1795— 1799	Napoleon 1804

- a. The above graph indicates the rapid shifting of the governmental machinery down to the beginning of the Empire. The names given are those of the educational leaders who brought forward plans for adoption, practically all of which remained unrealized. The development of a national system of education in France begins with Napoleon (see page 180).

- b. Conspicuous among the strivings for educational changes, some of which have since been accomplished, are: (1) primary schools throughout France, (2) a national normal school at Paris, (3) political and social morality to displace religion in the schools, (4) suppression of religious congregations (undone by Napoleon), (5) higher primary schools for the masses, (6) all schools open equally to men and women, (7) all instruction gratuitous, (8) a chain of national universities..
3. *Philanthropic Movement in Germany*—Basedow, with experience as private tutor, teacher in a gymnasium and in a ritterakademie behind him, and possessed of a spirit of revolt in religious matters, was turned definitely towards educational reform by the Rousselian influence. The steps in this reform, which was enthusiastically endorsed by Goethe, Schiller, Lavater, Kant, and Herder, were
- a. An *Address to Philanthropists* (1768) for funds; a plea for nonsectarian schools and a national body to control education. The second part of this plea was in line with nationalizing tendencies sponsored by Frederick the Great.
- b. The publication (1774) of two books, *Das Methodenbuch* intended for parents, and combining ideas garnered from Bacon, Comenius, and Rousseau on child rearing, and *Elementarwerk*, which was an illustrated reading book for children in German, dealing with natural phenomena, commerce, morals (vs. the doctrinal religion of Comenius).

nius' *Orbis Pictus*) and manners. It embodied the same pansophic fallacy as was found in sense realism.

c. The founding (1774) of the *Philanthropinum* at Dessau, an experimental school of four classes conducted "according to nature." The salient features of the school were

1. Children treated as children. The mannikin idea, so common in upper-class European society, had no place. Free, loose clothing, no wigs, etc.
2. While Latin and French were important subjects, *realstudien* (natural phenomena study, geography, etc.), mathematics, music, dancing, drawing, and physical training were also stressed.
3. Languages were to be taught by the conversational method.
4. Rich and poor were to be educated together though the future calling of the child was recognized in the time division among subjects.
5. Handwork for all.
6. Religion was considered important, but not in its theological phases. The Rous-sellian idea of putting the child in a position to make a later choice of a creed. This was the professed attitude of Frederick the Great: "in this country every man must go to heaven in his own way."

d. The spread and influence of the Philanthropic Idea.—Two of Basedow's assistants—Campe at Hamburg, Salzmann at Schnepfenthal—established schools of the same type, permeated by the spirit of experimentation

and the gospel of natural education. The parent school at Dessau was closed in 1793. The most important results of this movement were:

1. The furtherance of activity of an experimental kind in education (cf. Pestalozzi).
2. The contributions to the library of children's literature (*e.g.*, Swiss Family Robinson) and the prominence given the pictured reader.
3. The establishment of *realien* (sciences) alongside the humanistic content. One of Francke's contributions had been in this same field.
4. The putting into practice of Rousselian ideas of method in geography, geometry, natural history, thus furnishing the nexus between Rousseau and Pestalozzi.

QUESTIONS

(1) (a) State what Rousseau meant by "education according to nature." (b) Criticize the doctrine and the method he based upon it. (c) Account for the great influence his "Émile" had upon education.

(2) State two effects of the educational work of Rousseau.

(3) Describe the general plan for Émile's education as set forth by Rousseau.

(4) Discuss the work of Basedow's Philanthropinum, showing (a) what it contributed to education, (b) why it failed as an institution.

(5) What was Rousseau's position on *each* of the following topics: (a) the use of books, (b) the formation of habits, (c) the cultivation of the emotions or feelings.

(6) Of Rousseau it is said, "He certainly caused a more complete revolution in educational thought and practice than any one man or group of men that we have to consider." Explain the character of this "revolution in educational thought and practice."

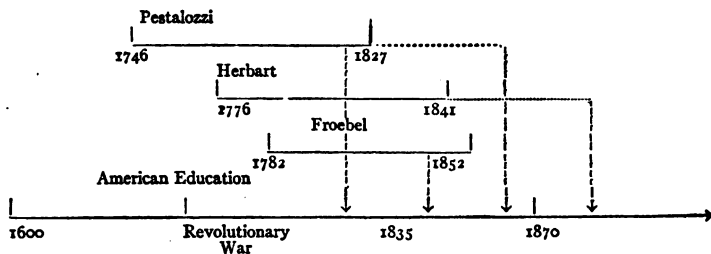
CHAPTER XVII

THE PSYCHOLOGICAL MOVEMENT IN EDUCATION

I. General Character of the Movement.—Regarding the child as the center of the educational process, a number of thinkers and teachers in the late eighteenth and nineteenth centuries addressed themselves to the problem of psychologizing education. Conspicuous among them were the Swiss Pestalozzi, the Germans Herbart and Froebel, the Italian Rosmini, and the Frenchman Jacotot. Some of the chief characteristics of the movement were

1. The belief that education was a development from within, not an imposition of adult standards on the growing child.
2. The belief that observation and experiment could lead to principles upon which education could securely rest.
3. The belief that interest is the keynote of successful teaching.
4. Careful attention to the primary years of the child's development.

II. Chronological Graph.—In the following graph the connecting lines represent the waves of influence coming to America from the work of each reformer.



III. Educational Work of Pestalozzi.—A good home influence, attendance at the University of Zurich, a desire to alleviate the conditions of the Swiss peasantry as minister, lawyer, and farmer, in all of which he failed, preceded his first educational experiment. From 1774 to his death his educational activities were

1. School at Neuhof, in which he attempted to give vocational training combined with instruction in the rudiments and religion to a group of indigent children, in a good home environment. Pedagogically the experiment was a success, financially it was a failure and was abandoned in 1780.
2. Period of literary production (1780-1798) featured by the didactic novel *Leonard and Gertrude*, the theme of which was social regeneration through education of the masses.
3. Experiments at Stanz, Burgdorf, Yverdon (1798-1825) in which he abandoned vocational education and focalized on the problem of improved methods in the teaching of the academic subjects, with special attention to the training of teachers (Burgdorf and Yverdon). The book *How Gertrude Teaches Her Children* (1801) is the best exposition of his methods which he has left. Following is a statement of his theory and of the spread of his influence.

A. Pestalozzi's Theory.

1. The *aim* of education is the "natural, progressive, and harmonious development of the powers and capacities of the human being." Education is the birthright of the individual; he falls short of the full stature of manhood without it.
2. The *method* of education must be grounded on three principles.
 - a. Reduction of all subjects to their unanalyzable elements (A-B-C), and the teaching of these subjects by carefully graded steps (simple to the complex). The influence of this principle has not been altogether happy in the teaching of reading, music, drawing, and some other subjects, but its net effect was salutary since it was a revolt against teaching language by abstract rules, arithmetic by rules of ciphering, geography by a wordy encyclopedic-dictionary approach.
 - b. Use of the object-lesson, where a direct appeal is made through sense experience rather than through words. Pestalozzi's language lessons grew out of objects present before the children; his geography lessons were developed out of field trips followed by the modeling of land forms perceived; his arithmetic lessons were worked out from the counting of windows in the room, steps across the room, etc., moral training was given out of incidents which arose in the daily lives of the children. It should be noted that Pestalozzi stressed neither history nor literature, first because they were not directly amenable to object-lesson teaching,

and second because of his prejudice against books in education.

- c. Oral teaching of all subjects—the child is not to learn a book, the teacher is not to hear the child recite on a book. Pestalozzi's dread of verbalism is the obverse of his firm belief in sense perception. Language is to come from oral description based on sense experience, not from reproduction of a printed text; arithmetic is to be largely oral and "mental"; the text is to be banished from geography, nature-study, and moral training. Corollaries from this principle were: the demand for a knowledge of subject-matter on the side of the teacher, for skill in questioning, in conducting reviews and drills, in organizing lesson units. The resulting stress on teacher preparation has been one of the most significant results of Pestalozzi's work.
3. The *content* of elementary education stressed by Pestalozzi was vocational (industrial, agricultural) training for future hand-workers—which phase found no place in the Burgdorf and Yverdon experiments because of the upper-class status of the pupils there—writing, drawing, music, language, number, geography, object-study, moral and religious training.
4. The *discipline* must be that of sympathy and love; it must reproduce the atmosphere of a good Christian home. This follows directly from his conception of education as development of the child, as opposed to the pressing of the growing child into adult moulds of behavior.

B. Spread of Pestalozzi's Influence.—There are two

phases of this: influence on vocational training, influence on methods of teaching the academic subjects.

1. *On Vocational Training.*

- a. In Switzerland this was crystallized in the work of Fellenberg (1806-1844) who carried on a group of experimental schools with the three-fold aim of giving agricultural preparation to peasant children, of training teachers for rural schools, and of developing mutual good-will between the land-holding and the tenant-farming classes.
- b. In England and Germany the idea was applied to the education of juvenile delinquents.
- c. In the United States the idea showed first (1825-1850) in the addition of manual labor to the activities of higher institutions—theological and liberal arts—to give physical exercise and to help poor students. It showed second (1873 on) in the education of juvenile delinquents, leading to such reforms as the segregation of young offenders from hardened criminals, the displacement of prison-contract labor, the growth of the cottage plan (reproduction of good home environment in education). It did not lead to manual training in the elementary and high schools, this being rather a Froebelian influence.

2. *On Methods of Teaching the Academic Subjects.*

- a. In Prussia, Pestalozzi's spirit was caught and put to work in the intensely nationalistic regeneration following the defeat at Jena by Napoleon (1806). Fichte and others di-

rected attention to the need of Pestalozzi's spirit in building up a strong, loyal population. In the middle of the nineteenth century, the school system of the country was characterized as "Prussian-Pestalozzian."

- b. In England, philanthropic workers in the educational field (see page 135) opened a training school for teachers stressing Pestalozzian methods. They gave special attention to object-lessons which in their hands became highly formalized and bookish.
- c. In the United States there were two main waves of influence. First (1820-1860) the publication of reports by Americans who had visited Switzerland or Prussia (Horace Mann, Griscom, Stowe, etc.) and the introduction into particular schools of new-type textbooks, especially *Colburn's Arithmetic*. Second the Oswego Movement (1860 on), radiating from Oswego, New York, characterized on the side of method by the formalized interpretation borrowed from England, but leading withal to an enriched content, more psychological methods, and careful teacher training.

QUESTIONS

(1) Write two pages on the application of Pestalozzi's methods to elementary grade work.

(2) State two effects of the educational work of Pestalozzi.

(3) Describe briefly *one* of the schools established by Pestalozzi. What were the leading characteristics of Pestalozzi's spirit and method?

(4) What practices in modern schools may be traced to the influence of Pestalozzi?

(5) Account for the fact that Pestalozzi has so largely influenced education though he failed in nearly every work he undertook.

IV. Educational Work of Herbart.—A university education during which he came strongly under the influence of the New Humanism (the revolt of German intellectuals against the dominance of French culture, and the striving for a new culture based on the best in the Greek interpretation of life), three years as a private tutor, a long experience as a university professor of philosophy—these formed the antecedents of Herbart's attempt to found a science of education. In lieu of the passion for sociological reform which actuated Pestalozzi's experiments, Herbart brought a systematic philosophy to bear on the problem of human development. The best statement of his views is given in the *Outlines of Educational Doctrine*, 1835.

A. Herbart's Theory.

1. The *aim* of education is moral character.
 - a. This he conceives not in terms of the development of the faculty of will (which as a separate faculty he denies), but in terms of the upbuilding of a group of abiding, many-sided interests.
 - b. These desirable interests connected with things (*e.g.*, reflection about natural laws) and interests connected with people (*e.g.*, participation in public affairs), may be made to result from properly selected ideas presented in a proper way at the proper time to a properly prepared mind.
 - c. Instructional method and scientific preparation of teachers thus receive tremendous emphasis.
2. The *content* of education, like the interests which are the ends of instruction, is two-fold: studies dealing with people (particularly literature and history), and studies dealing with

things (particularly mathematics, sciences, fine arts). Herbart himself was more concerned with secondary than with elementary education, and would give Greek a prominent place as a medium for presenting ideas conducive to desirable interests connected with people, ideas of moral conduct and social efficiency. All the Herbartians have emphasized history and literature as preëminent for moral instruction.

3. The *method* of education should be based on four doctrines which can be merely stated here.
 - a. Doctrine of Interest.—Knowledge acquired without the warm glow of interest is knowledge which the child may get or not get and be the same child; it is not knowledge which makes for moral character. In a sense the other doctrines are statements of how interest may be aroused, interest itself being the *sine qua non* of educative instruction. If this view is taken, it will be a safeguard against assuming that interest with Herbart meant sugar-coating, or teacher-activity with pupil-passivity.
 - b. Doctrine of Apperception.—If a child is to be interested in a school experience (if he is to attend to it without threats) he must have something in the mind with which to attend. This something is found in groups of related ideas (apperceptive masses, apperceptive stocks). The mind interprets or responds to a given situation in terms of (1) past experience, (2) the present frame of mind (revived experiences). The implications for teaching are easily deducible.
 - c. Doctrine of Correlation.—Herbart attached

two meanings to this: (1) school subjects should not be atomized; mathematics should be linked to the pupil's knowledge of nature, and (2) literature dealing with the youth of the race (*e.g.*, *Odyssey*) is best adapted to the youth of the individual. This slender hint dropped by Herbart was later elaborated into the Culture Epochs Theory and has been a nice subject for academic discussion since.

- d. **Doctrine of the Formal Steps of Instruction.**—An order of procedure in teaching, either in single lessons or in larger units, assumed to parallel the order of learning. In the expanded form given Herbart's analysis by his followers, the steps were : (1) Preparation, the apperceptive step, (2) Presentation of the new material closely articulated with past experience, (3) Comparison or Association, to lift into prominence the common elements and the differences in the examples presented, (4) Generalization, (5) Application, to put the generalized idea to work, sometimes to test it, sometimes to deepen the impression through expression. Dewey has challenged the "steps" of the Herbartians first, on the ground that thinking normally occurs when there is a problem, a discrepancy engaging our attention, and that the formal steps make no provision for this; second, on the ground that acquiring knowledge should be incidental to thought development, and not vice versa as in the procedure of the Herbartians.

B. Spread of Herbart's Influence.

1. In Germany there were two centers of Herbartianism.

- a. At Leipzig under Ziller (1865). The doctrine of correlation was narrowed into the doctrine of concentration and the implication of parallelism between individual and racial development was elaborated into the Culture Epochs Theory. Ziller also prefaced the four formal steps of Herbart by the preparatory step.
- b. At Jena under Rein (1875). The pedagogical seminar introduced at Königsberg by Herbart was given a dignified place in university instruction, a course of study along Herbartian lines was worked out for the volksschule, and the "aim" (statement of the objective of the lesson unit) was inserted between the preparatory and presentation steps of the formal plan.
2. In the United States.—A group of young men from the normal school, Illinois, studied at Jena and returned to spread the new science of education (about 1890). Important traces of this movement are:
 - a. *On Content*.—History and literature have become important constituents of the elementary school course of study. History, before 1890 confined to the upper grades, limited to American history with patriotism as the sole aim, has been given a place in all grades, has drawn from Roman, Greek, Norse and other sources as well as American, and has added to love of country moral and social aims. Literature, from the Revolutionary War to 1890 very limited in scope yet getting 37 per cent of all school time, used solely to give practice in oral expression, has since drawn heavily from the library of children's

classics in the lower grades and from complete masterpieces in the upper grades, and has shifted emphasis to the moral and esthetic aims.

- b. On Method.*—The doctrines of interest (with new interpretations by Dewey and others), correlation, apperception, and the formal steps have had a wide vogue in American normal schools. The Culture Epochs Theory has permeated the work of the Clark University group, and readers for children have been constructed based upon the assumed soundness of the racial parallelism. Graduate seminars have also been established in a number of American universities.

QUESTIONS

- (1) Who was Herbart? Describe or state his leading ideas as to education.
- (2) Show how, according to the Herbartian theory, the development of moral character depends on instruction.
- (3) What does modern education owe especially to Herbart?

V. Educational Work of Froebel.—An unhappy home environment, a deeply introspective and religious nature (which Froebel attributes to other children), intimate contacts with sub-human nature (which Froebel later, like Wordsworth, believed could give insights into human nature), attendance at the University of Jena in the days of idealistic and prævolutionary philosophy, preceded his first teaching work. His actual teaching experience was gotten (*a*) in a Pestalozzian school at Frankfort, (*b*) as a private tutor of three children at Pestalozzi's institute at Yverdon, (*c*) as head of the experimental school at Keilhau, (*d*) as a teacher in Switzerland, during which time he formulated the ma-

terials for his last experiment, (*e*) as founder and leader of the kindergarten at Blankenburg. This kindergarten and others modeled on it were closed by the reactionary Prussian government in 1851.

A. Froebel's Writings.—Froebel was a prolific writer.

The best exposition of the theoretical basis of his work is the *Education of Man*, written in 1826 to popularize the Keilhau school. The best application of his philosophy is the *Mother Play and Nursery Songs*, written in 1843, during the life of the kindergarten at Blankenburg.

B. Froebel's Theory.

1. The *aim* of education is development of the latent powers of the individual. All that man is ever to be, lies, however slightly indicated, in the child. If the child's original nature is "marred" (bad heredity), it must be redirected. If the child displays activities not true to his principle of inner growth (*e.g.*, is destructive rather than manipulative), these must be watched for and corrected. With this conception of the aim of education are closely connected:

a. The Law of Unity.—The source of all created objects (including the child's mind) is God. Hence the growing tree, the forming crystal, the developing child, reflect God's plan, but under different manifestations. This is the basis of Froebel's belief that in observing and studying crystals he was getting valuable insights into human development. Less mystical applications of this doctrine of unity are: (1) the unity of knowing, feeling, and doing; these must be exercised in conjunction with one another, (2)

the unity in the child's development (continuity) which made any definite age (six in the volksschule, three in the kindergarten) too sudden a starting-point; education begins at birth—even before birth, for Froebel was groping his way towards the belief in heredity as an educational determinant (racial connectedness).

- b. Froebel's Symbolism.—As a corollary of his belief that the Divine plan was immanent in all created objects, there followed the assumption that spiritual meanings lay behind all phenomena, even the most commonplace (*e.g.*, the game of hide-and-seek, the taste game). It was this belief which led Froebel to study carefully the untutored reactions between mother and child, and which makes the *Mother Play* a book that has given countless young women a beautiful symbolic insight into the heart of the child. A controversy has been waged around this symbolic interpretation. The critics of Froebel (Kilpatrick, Dewey, Thorndike, etc.) hold that a symbol for the adult is not a symbol for the child. The Froebelians (*e.g.*, Susan Blow and her followers) answer that an explicit symbol for the adult is a latent, implicit symbol for the child. Froebel has left a clear enough statement showing that he did not believe that the young child is conscious of spiritual values in his activities.
2. The *method* of education is self-activity, which is not to be confused with mere motor (manual or vocal or gross muscular) activity. When a child is creating ("making the inner outer"), he

is developing. Froebel resorts to symbolism to get a powerful sanction for creativeness in education: it is the most nearly divine attribute of the child, since the attribute of creativeness is inseparable from any concept of deity. Montessori calls this principle of method "auto-education."

3. The *environment* in which education should take place is a social one; the school is society in miniature. Froebel differs from Rousseau here and also from Montessori, the spirit of whose *case dei bambini* is intensely individualistic, growing out of her principle of liberty.

C. Lines of Influence Emanating from Froebel.—

There are four lines of influence in present-day theory which proceed from Froebel.

1. *The Kindergarten Idea.*—The conception that organized development of children of pre-school age is essential is at least as old as Comenius. It was revived again by Oberlin in France, and by Owen in Scotland. But its philosophic basis was first formulated by Froebel. His play materials (gifts and occupations), his insistence on the simultaneous development of song, gesture, language, and constructive activity, and his conception of the school as a miniature society have persisted, even where his symbolism has been discarded. Some modifications, due to a better knowledge of the needs of children, have been
 - a. The substitution of activities calling into play the larger muscular coordinations for those of Froebel; "little children like to do big things."
 - b. The reproduction of modern rather than of primitive activities in the kindergarten plays.

- c. Departure from the exact order in which play materials were to be used, which order with Froebel was assumed to have important disciplinary and symbolic value.
 2. *Play in Education*.—While many before him had stressed the physical values of play, Froebel saw in it also important social and intellectual by-products. The whole movement for directed or supervised play aims to create a play environment rich in these other values.
 3. *Handwork in Education*.—While handwork had been emphasized by others, *e.g.*, Rousseau (economic and democratic values), Locke (avocational, sedative value), Basedow (economic and democratic values), Pestalozzi and Fellenberg (economic value), the aim of such work with Froebel was different. It was a psychological aim, training in power of expression, the clarifying of impression through motor expression, the training of the mind through the hand. This has remained the objective of the work in wood, metal, leather, cardboard, clay, raffia, cord, etc., in all save strictly vocational schools.
 4. *Nature Study in Education*.—Along with other influences, the Froebelian note here is to be found in the shifting of emphasis from a logical, classificatory study of minerals, animals, and plants with stress on technical terminology (the elementary science which developed out of Pestalozzian object-lessons) to a study of the growing plant (window-boxes, school gardens), the living and functioning animal (school zoos, pets, aquaria, etc.).
- D. *Spread of Froebel's Influence*.—Only the institutionalization of his ideas in the school for very little

children can be here traced. It should be noted, however, that the lines of influence above noted made themselves felt in elementary and even in secondary schools. For example, the manual training movement under Cygnaeus in Finland (1866), under Salomon in Sweden (1877), in France (1882), in England (1887), is a phase of Froebelianism.

1. *In Germany.*—The kindergartens which had been closed by the reactionary government were permitted to reopen in 1860. But up to the outbreak of the World War they had made but little progress, developing outside the state school system.
2. *In England and France.*—The infant school had already arisen before the work of Froebel (see page 71). Nevertheless, the spirit of Froebel has leavened the work of the infant school in England and of the upper division of the école maternelle in France—the lower division which admits children at two being really a day nursery.
3. *In the United States.*—The imported infant school had developed into the primary department of the elementary school. It was the Froebelian influence which gave the name as well as the spirit to the American pre-elementary institution. Significant steps in this growth were:
 - a. Private German kindergartens opened by immigrants in the "fifties."
 - b. The first private English-speaking kindergarten opened by Elizabeth Peabody in Boston, 1860.
 - c. The first private training-school for kindergartners opened in Boston, 1868.

- d.* The first public kindergarten opened as part of the St. Louis school system by Susan Blow and William T. Harris, 1873.
- e.* The attempt in all our states to amend the educational law to permit school districts to add this lowest rung to our educational ladder—in the midst of which movement we now are.

QUESTIONS

- (1) Write two pages on the value of the kindergarten.
- (2) Describe the origin and development of the kindergarten in Europe and America.
- (3) What do you consider the most important principle advocated by Froebel? Explain.
- (4) State and explain briefly Froebel's theory of education.

CHAPTER XVIII

THE SCIENTIFIC MOVEMENT IN EDUCATION

- I. Two Aspects of the Scientific Movement.**—These are (1) the *theoretical* side, which is best understood by an analysis of the argument for science as presented by Herbert Spencer, and (2) the *institutional* side, the actual introduction of scientific content and method into the schools of Europe and America.
- II. Background of the Movement.**
1. The scientific revival of the late sixteenth and seventeenth centuries was reflected in the sense realistic movement outside the schools, which reacted back on the schools (*e.g.*, Halle, Real-schule, Academy, etc.). Yet the Renaissance-Reformation schools were not much affected.
 2. The psychological basis of sense realism was elaborated by Descartes, Bacon, and Locke.
 3. A new impetus was given to the importance of scientific content by Rousseau, and partially worked out by Basedow and the philanthropinists.
 4. And again by Pestalozzi.
 5. The nineteenth century was characterized by tremendous developments in pure science (astronomy, geology, biology, physiology, physics, etc.), and in the application of science to agriculture (cotton-gin), manufacture (sewing-machine), transportation (steamboat, locomotive), and to every phase of practical life.

6. This led to a new conception of liberal education and a demand that schools give the new content and the new method a conspicuous place in their work.

III. Theoretical Emphasis by Herbert Spencer (1820-1903).—Private training in a scholarly home, extensive reading, vocational experiences in architecture, engineering, and editorial work constituted the background which Spencer brought to his work. His educational philosophy, which popularized in England the best thought on education from Pestalozzi down, is best given in the four essays published under the title *Education* (1861).

A. What Knowledge is of Most Worth?

1. The aim of education is preparation for complete living.
2. Complete living consists in physical well-being for which a knowledge of physiology is requisite; in vocational capacity for which a knowledge of mathematics, physics, chemistry, biology, and sociology is requisite; in parenthood for which a knowledge of physiology, psychology, and ethics is requisite; in citizenship for which a knowledge of political, social, and economic history is requisite; in capacity to enjoy the finer things of life for which a knowledge of the sciences underlying the fine arts (physiology, mechanics, psychology, etc.) is requisite.
3. Besides the content value of science, there is its value as an instrument for training memory, understanding, judgment, intellectual independence, and the religious consciousness, in which respect it is superior to the study of languages.

B. Intellectual Education, Moral Education, Physical Education.—In these three essays, Spencer restated

many of the tenets of earlier reformers and gave vogue to some previously little known in England.

For example:

1. Powers of observation to be cultivated.
2. Object-teaching to be stressed.
3. Learning should proceed through self-instruction and under the impulsion of interest.
4. Artificial punishments to be avoided: Spencer endorsed Rousseau's conception of punishment through natural consequences.
5. Hardening process in the physical upbringing of the child attacked (vs. Montaigne, Locke, Rousseau).
6. Endorsed culture epochs theory as a broad principle to guide in content and method.

IV. Institutional Reflections of the Scientific Movement.

A. United States.

1. The **elementary** schools taught only geography of the scientific subjects until the influence of Mann led to the addition of physiology, the Oswego Movement to object-lessons, the work of William T. Harris to elementary science, and the Froebelian influence to nature-study.
2. The **secondary** schools of the academy type introduced scientific studies, the English High School as it developed continued them, and the work was shifted from the bookish-demonstration basis to the laboratory basis in the last part of the nineteenth century.
3. In the **higher** institutions the "natural history" of the colonial colleges has developed into a body of separate sciences since the beginning of the nineteenth century. At first, experiments were performed by the instructor only, then (after 1850) by the students themselves. Dig Special higher

schools devoted to science and its applications have been founded (engineering, military science, naval science, etc.).

B. Germany.

1. The **elementary** schools added scientific material to their curriculum under the impetus of the imported Pestalozzian influence after the Battle of Jena.
2. The **secondary** schools of the Renaissance (gymnasien) remained unaffected until the early nineteenth century, when some science was given a place. Other types of secondary schools which give the sciences a prominent place (realschulen, oberrealschulen, realgymnasien) have contested the monopoly of the gymnasien successfully, and strictly vocational schools above the elementary level have been friendly to scientific material as a basis for industrial activity.
3. The **universities** have added to the scientific spirit which first appeared at Halle, the laboratory method (begun by Liebig at Giessen, 1826), and higher schools of applied science (technische hochschulen) have arisen in close touch with the needs of industry.

C. France.

1. The **elementary** schools (lower and higher primary) introduced scientific content only after the Franco-Prussian War (1870), thus being later than the United States or Germany. The lower primary schools develop the material around drawing, handwork, agriculture, and geography while the higher primary schools have regular courses in the natural and physical sciences and in hygiene.
2. The **secondary** schools added science in the days

of the Revolution (1792-1799), but received the first definite impulse in this direction under the Consulate, when Napoleon (1802) built up a strong scientific program for the lycées. This material, however, was not a part of the classical course, but rather a new course. The next step was to require science even in the classical course (1814-1840), which provision met with opposition and the science work was then made optional. To-day there are four courses in the lycée, two of which give scientific studies a large place.

3. The **universities** practically ignored science before the Revolution, but special higher schools (*e.g.*, for bridges and highways, for mining engineering) had been established as early as 1747, the first higher technical schools in the world. After the Revolution, a number of important higher technical institutions arose, most of which are still in existence.

D. England.

1. The **elementary** schools did not have compulsory science study until 1900, but some science was taught in certain schools for which these schools were given subsidies between 1890 and 1900.
2. The first **secondary** schools to include science were the academies of the Dissenters, but these academies had ceased to play an important part in English education before 1800. The Renaissance secondary schools (public and grammar) remained uninfluenced by the new tendencies until after the government investigation of endowed schools (1868) when they introduced a "modern side." However, liberal subsidies to

schools which would introduce scientific studies encouraged many secondary institutions to undertake the work.

3. In the universities physical science found a place early (Cambridge) as a result of Newton's work, but the methods were bookish. It was not until about 1850 that biological science was added and laboratory methods introduced. A new type of higher institution, the municipal university (Sheffield, Leeds, Birmingham, Manchester, London, etc.) has done most for the advanced study of science in close relation to its practical applications.

QUESTIONS

- (1) Write briefly on the origin and growth of the study of the natural sciences.
- (2) What was Spencer's conception of the purpose of education? From this conception what argument for industrial education may be drawn?
- (3) Give the essential features of Spencer's *Education*.

CHAPTER XIX

THE PUBLIC SCHOOL REVIVAL AND SUBSEQUENT DEVELOPMENTS IN THE UNITED STATES

I. Public School Revival (1835-1870).

A. Background.

1. By 1835, half a dozen states had some organization of common schools, a dozen others had erected state funds waiting to be disbursed to encourage local initiative, all the newer states had received a share in the national land grants both for common schools and for state universities.
2. By 1835, the private academy had become the chief type of secondary school, and with the monitorial school, the chief teacher-training institution.
3. By 1835, especially in New England, decentralization had progressed to the point where the school district had practically complete autonomy in school matters.
4. During the Revival, the Pestalozzian influence was coming over through visits of Americans to Europe and through the Oswego Movement. The Froebelian influence was also coming over in the form of the private kindergarten.

- B. Work of James G. Carter.**—As a school teacher, writer, and member of the legislature of Massachusetts, he agitated for

1. A normal school. Carter opened a private normal school himself, the second in America—the first having been opened by Hall in Vermont.
 2. A law to vest in the town and not in the district the supervisory function with respect to common schools—passed but with compromise.
 3. A law compelling each sizable town to support an English high school, and each large town a classical high school—passed but not rigorously enforced.
 4. A law establishing a state school fund to be divided among towns meeting the state grant through taxation—passed.
 5. A law establishing a State Board of Education—passed and Horace Mann made secretary (1837).
- C. **Work of Horace Mann (1796-1859).**—As Secretary of the State Board in Massachusetts, Mann had no executive power; he was to collect and disseminate information, inspect schools, make recommendations.
1. The *means* used were first, the publication of annual reports, the seventh of which, describing the Prussian-Pestalozzian schools, has become a classic; second, lectures; third, the publication of the *Massachusetts Common School Journal*.
 2. The *results* achieved, despite great obstacles, were: first, the carrying to fruition of Carter's program through the establishment of three state normal schools, the training of teachers in service and the increase in their salaries, the enforcement of the public high school law with a corresponding decrease in the expenditure of public money through private schools, the strengthening of the town committee law by making compensation of its members compulsory;

second, lengthening of the school year, improvement of school buildings, addition of physiology to the elementary course, humanizing of discipline, introduction of school libraries, and the elimination of religion save the reading of the Bible without comment.

D. Work of Henry Barnard (1811-1900).—The five phases of Barnard's contribution to the Revival were

1. As Secretary of the State Board in Connecticut, where he waged a losing fight against decentralization of control.
2. As first Commissioner of Common Schools in Rhode Island, where he succeeded in overcoming the traditional hostility to state action in education.
3. As State Superintendent of Common Schools in Connecticut, whither he was recalled, where he built up a strong state normal school, and encouraged local taxation.
4. As the scholar of the Revival. He published a *Journal of Education* in thirty-one volumes (1855-1881), "the most encyclopedic work on education in any tongue."
5. As first United States Commissioner of Education (1867), an office the need of which he had long urged, and the activities of which are indispensable to-day.

II. Subsequent Developments in the United States.—

A. Public Normal Schools.—This phase of the Revival eventuated in twelve state institutions in nine states by 1860. The first in New York was opened at Albany in 1844 under Principal David P. Page, author of one of the most widely read books on education (*Theory and Practice of Teaching*), who

lectured throughout the state to save the state normal school from the attempts of politicians to destroy it. Since 1895 the growth of public (state and city) normal schools has been rapid and has been accompanied by an equally rapid decline in the number of private teacher-training schools. The work of public normal schools has been reinforced by the development of pedagogy as a college and graduate university study.

B. State Superintendents.—New York, the first state to set up such an office (1812), had abolished it before the Revival. The office held by Mann in Massachusetts, by Barnard in Rhode Island and Connecticut, gave a new impetus to this phase of public education. By 1850, nine states had established ex-officio state school officers, and seven, regular school officers. New York restored the regular state office in 1854; among its prominent incumbents have been Victor M. Rice, who was active in the establishment of state normal schools and in the abolition of the rate-bill, which made the schools of the state free (1867), Andrew S. Draper, and John H. Finley. To-day every state has established this office under some name. The belief in expert supervision has shown itself also in the creation of the offices of county superintendents and city superintendents of schools, of which latter there are about fourteen hundred to-day.

C. Free Schools.—Even after state funds had been set up to encourage districts to establish and maintain schools, and after many districts had raised money in a variety of ways so that they might share in these state funds, there remained the rate-bill as a partial means of school support. This was a charge placed on parents *pro rata* (in proportion to the

number of children sent by each parent to school) and was designed to make up the deficiency in revenue. The cities abolished the rate-bill in many cases long before state-wide action was taken; for example, New York City in 1832. In New York, the schools of the state became absolutely free only in 1867; six other states had accomplished this earlier, but the conflict in New York was pivotal, and the principle "that the property of the state should educate the children of the state" was accepted without serious contest in the remaining states.

D. Other Developments.—The most salient of these can only be catalogued here.

1. The growth of public high schools, begun in 1821, halting up to 1860, checked by the Civil War, rapid and nation-wide since 1880.
2. The differentiation of courses of study in these high schools.
3. Growth of vocational schools, some of which have shared in special federal aid—colleges of agriculture in the Morrill Act (1862), elementary industrial, home economics, and agricultural schools in the Smith-Hughes Act (1917).
4. Extension of public school facilities through evening schools, lectures, classes for aliens who require training in English, etc.
5. Expansion of the colleges and universities from institutions which in 1850 conferred an A.B. degree for completion of a course based on Greek, Latin, and Mathematics, to institutions which have established chairs in every important field of secular knowledge and which grant a great variety of degrees. An important event in this development was the founding of the first

distinctively graduate institution, Johns Hopkins, modeled on German lines (1876).

6. Opening of higher educational opportunities to women. In 1800 women could not enter any college in the United States. Emma Willard at Troy (1821), and Mary Lyon at Mount Holyoke (1837) opened seminaries, the first higher institutions for girls. To-day, eighty per cent of the non-Catholic colleges are open to women, while many special colleges are for women only.

QUESTIONS

(1) Show what contributions to education have been made by any *two* of the following: Henry Barnard, Mary Lyon, Edward A. Sheldon, Emma Willard.

(2) Tell when and by whom the first normal school was established in America; in New York. By what agencies is professional instruction for teachers given in this state (New York)?

(3) Mention conditions in the school work of to-day that may be traced to the influence of Horace Mann?

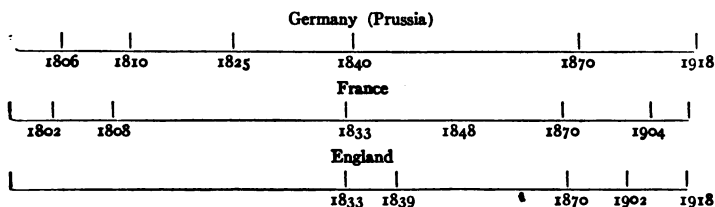
(4) In what did the success of David Page as an educator consist?

(5) Give, in chronologic order, six steps in the development of the school system of this state (New York).

CHAPTER XX

DEVELOPMENT OF NATIONAL SCHOOL SYSTEMS IN EUROPE

I. **Chronological Graph.**—The following graphs indicate the dates of significant developments during the nineteenth century in Germany, France, and England:



II. Germany (Prussia).

- A. The first date in the graph (1806) represents the defeat at Jena by Napoleon and the growth of a powerful nationalistic spirit which is the keynote of nineteenth century Prussian educational history. A Department of Public Instruction was set up and Pestalozzian reforms introduced into the *volks-schulen*. Teachers' Seminaries were established to insure a succession of well-trained elementary teachers.
- B. The second date (1810) represents the standardization of work in the secondary schools (*gymnasien*) by setting up an examination to be passed by all teachers; this necessitated university preparation and led also to pedagogical seminars in the universities. Soon followed the institution of the leaving

examinations, success in which was the vestibule to the universities and the civil service. This date (1810) represents also Prussia's attempt to rehabilitate her university education by the founding of the University of Berlin. Napoleon had taken all the Prussian universities save three along the Baltic. Berlin was not so much a school as a place for investigation, research, and intense specialization by students and professors. The older universities when recovered, and new universities were patterned upon Berlin, and Johns Hopkins in America was founded on this model in 1876.

C. The third date (1825) marks the crystallization of the Prussian two-class school system:

1. The *volksschule*, an entirely vernacular school for the masses (92 per cent of the population), covering the years from 6 to 14, on top of which some higher elementary or continuation schooling began to appear, and the teachers for which were trained in Teachers' Seminaries.
2. The classical secondary school, covering the years from 9 to 18, leading to the leaving examination which in turn leads to the university or civil service. This school was intended for a small and carefully selected class (8 per cent of the population), and its teachers were government officials, university trained and state certified.

D. The fourth date (1840) represents the triumph of the reactionary spirit which had been gaining ground since the Congress of Vienna (1815), and which led in Germany as elsewhere to the unsuccessful revolutions of 1848. There are two sides to this:

1. The framework of education was not much altered. In fact, various decrees strengthened

it; for example, the enforcement of compulsory attendance at volksschulen, the attempt to abolish all tuition fees there.

2. The spirit changed. Blind, military obedience, restriction of university freedom, compulsory Latin and Greek in secondary schools, and these on a linguistic drill basis, realschulen treated with disfavor, content in volksschulen cut to the rudiments and orthodox religious instruction ordered, Teachers' Seminaries ordered to train elementary school teachers, not educated men—these will serve as indices of the changed spirit. It was during this period that the kindergartens were suppressed in Prussia (see page 159).
- E. The fifth date (1870) represents the changes incident upon unification and the new industrial demands.
1. Clerical control, which had crept in during the period from 1840 to 1870, was again subordinated to political control, though religious content remained. The building of a powerful state became paramount, and the volksschulen became institutions for combating the growth of social democracy.
 2. *Realien* (scientific subjects) and modern languages replaced the earlier emphasis on Greek in the secondary schools. Realschulen (6 year course) and Oberrealschulen (9 year course) were given approximately the same standing as the corresponding six and nine-year classical schools—a process which had been begun in 1859. Science, commerce, technical work, modern languages, and government were stressed in the instruction of the leaders.
- F. The sixth date (1918) represents the new stirrings

of democracy in Germany under the Republic. As in Austria, the reforms are directed to the building up of a ladder system approximating that in the United States, each school leading to the next higher, with capacity to do the work and pass examinations as the sole tests for continuance. This is the problem of the *Einheitsschule*; it calls for the abolition of the exclusive preparatory school to the secondary schools (*Vorschule*) and for articulation between the people's schools and the schools which lead to the universities. While definite religious instruction has been abolished from the German schools, the abolition has been protested against vigorously in all parts of the country.

III. France.

- A. The first date (1802) represents Napoleon's Concordat with the Pope, which brought back the clergy and conventual orders driven out by the Revolution, and which restored primary education to them. It also stands for the promulgation of a law (1) establishing the secondary schools (communal collèges and lycées) on a standardized basis, and (2) establishing special higher schools (*faculties*) which replaced the old universities.
- B. The second date (1808) represents further centralization by Napoleon through the creation of the University of France. This was not a teaching body, but an examining and inspecting body for all schools, primary, secondary (lycées and collèges), and higher (faculties). The closest American analogy is the University of the State of New York.
- C. The third date (1833) represents the passage of the primary school law growing out of Cousin's *Report on the Condition of Public Instruction in Prussia*.

While the principles of both compulsory attendance and gratuitous instruction for all were absent from this law, it laid the foundation for present-day universal instruction in France. It provided for:

1. A primary school in every commune, to be supported by the commune save that a tuition fee was to be paid where it could be afforded. The content was to include, besides the three R's, weights and measures, French, morals, and religion.
 2. Higher primary (really middle class) schools in towns and cities, with a practical content, but entirely vernacular.
- D. The fourth date (1848) represents the overthrow of the monarchy through the forced abdication of Louis-Philippe and the ushering in of a short-lived republic, which passed into the Second Empire (1852-1870). This date may be considered the beginning of a reactionary attitude towards education, which persisted until the Third Republic (1870 on).
1. The schools established by the law of 1833 fell under suspicion; religious and private schools were favored.
 2. The course in the department normal schools to train teachers for the primary schools was curtailed.
 3. Yet the recognized need of scientific studies for manufacture and commerce caused a stress on these as against the unfavorable attitude towards them in Prussia during the corresponding period.
- E. The fifth date (1870) represents the defeat by Germany and the beginning of the Third Republic. As in Prussia in 1806, the need for rehabilitation has led to a powerful emphasis on the nationalistic ob-

jective and the completion of the most centralized and secularized system in the world.

1. To the law of 1833 have been added first, the principle of free primary and higher primary schools (1881), and second, the principle of compulsory attendance at primary schools (1882).
2. To replace the faculties of Napoleon, fifteen national universities have been created (1885-1896).
3. To the scant provision for a succession of trained teachers under the law of 1833 have been added (practically) two normal schools for each of the ninety departments, one for men, one for women.
4. Finally, France has carried secularization to a degree incompatible with the American conception of democracy by closing the free schools directed by the conventual orders, and thus giving the state a virtual monopoly in primary education (1904). The voters of the state of Michigan in 1920 defeated a state constitutional amendment which, if passed, would have set up the French standard in that state.

IV. England.

- A. The first date (1833) represents the time when the British government made its first disbursement of public money for elementary education. This was £20,000 a year, and was to be divided equally between the two monitorial societies (Lancaster's and Bell's) for building school-houses, thus making these societies quasi-public agencies. This action of the government was itself the outgrowth of the Reform Bill (1832) which increased the electorate and gave point to the argument of liberals that education for citizenship was a public duty.

- B. The second date (1839) represents (1) the augmentation of the government grant to £30,000, and removal of restrictions as to its use, so long as it was used for elementary education, and (2) the appointment of a separate committee of the Privy Council to administer the educational subsidies.
- C. The third date (1870) represents the passage of the Forster elementary school bill, inspired by the Second Reform Act (1867) which, by reducing the property qualifications, greatly increased the number of voters. This provided
1. For the division of the country into school districts.
 2. For the continuance of denominational schools to be known as voluntary or non-provided (since the buildings were not provided by the state), these schools to share in the government grants, and to teach religion, but under a conscience clause.
 3. For the establishment of board schools (because under a public local board of education) wherever the voluntary schools did not meet the need, these schools to share in local rates as well as in government grants, and to exclude denominational instruction.
 4. It did not incorporate either the principle of compulsory attendance nor the principle of gratuitous instruction for all.
- The next year (1871) all religious tests for the university degree, which tests had survived from Tudor times, were withdrawn.
- D. The fourth date (1902) represents the passage of the Balfour Education Act, a conservative measure to extend the benefit of the local rates to the volun-

tary schools. Besides doing this, however, it provided

1. A better administrative mechanism for both board and voluntary schools.
2. That instruction above the elementary level (*i.e.*, higher elementary instruction) be supported out of the grants.
3. That the Board of Education (which had taken over the functions of the Privy Council committee in 1899) pass on the work of the secondary schools (grammar, public, and other endowed types) and allow government grants to those deserving.

E. The fifth date (1918) represents the passage of the Fisher Education Act, which has (1) greatly extended the period of compulsory attendance, building on what had been provided in 1899, (2) conserved the motive for local and denominational initiative, avoiding the paternalistic French solution, (3) increased taxes for education, (4) opened the higher (secondary) opportunities to all capable children by a liberal system of scholarships and maintenance grants.

MISCELLANEOUS QUESTIONS

(1) Explain "humanism," "vocational training." In connection with each, name two persons associated with it in the history of education.

(2) Give an account of two of the following, using about a page for each: (a) the schools of the Jesuits, (b) the medieval universities, (c) the public schools of England, (d) the schools of Pestalozzi.

(3) Name and refer to its proper century one book on education by each of four of the following: Horace Mann, John Locke, Ascham, Milton, Fénelon, Froebel, Spencer.

(4) Name the authors of the following books and state for each of three of the books two matters of educational principle or practice inculcated in it: *Orbis Pictus*, *Thoughts on Education*, Leonard and Gertrude, *Elementarwerk*, Education of Man, Education.

(5) Name any point of similarity that is to be found in the educational ideas of Rousseau, Pestalozzi, Herbart, Froebel, and show how Herbart and Froebel applied the point in question.

(6) State some important fact concerning the work of each of *four* of the following educators: LaSalle, Abelard, Mary Lyon, Rousseau, Sturm, Spencer.

(7) Tell to whom we are largely indebted for each of *three* of the following: a science of pedagogy, illustrated textbooks, the beginning of normal schools in America, the kindergarten.

(8) Trace the development of education for girls and show how it has been affected by St. Jerome, Fénelon, Mary Lyon, Emma Willard.

(9) Show how education in the 18th and 19th centuries was directly influenced by *two* important political or social changes.

(10) Both Rousseau and Pestalozzi asserted that the development of the child should follow the order of nature. Show wherein they differed as to what the order of nature is.

(11) What is meant by object teaching? What psychological principle underlies it? Name two prominent advocates of it.

(12) Give the history of normal schools in the United States.

(13) Give the title and author of each of *four* important books (not textbooks) on education written during the 19th century. Show the particular value of each of *two* of these books.

(14) Give at least *four* facts of interest in the origin and growth of compulsory education.

(15) Write on the beginnings of primary education in modern times.

(16) Give an account of the Real School in Germany and show how it differs from the Gymnasium.

(17) Name three teaching societies in Europe and give approximately the date when each began its work.

(18) "All in all, the educational influence of John Amos Comenius has been greater than that of any other man of recent times."—Hinsdale. Justify or oppose this view. In either case consider the rival claims of two other great names in the history of education.

(19) Name educators (not now living) whose names are connected with the following respectively: the psychology of education; the study of the vernacular; humanism; trade education.

(20) Write on *one* of the following topics: Ascham as a teacher and his method of double translation, Basedow and the Philanthropin.

FALSE-TRUE TEST

Put a plus sign to the left of each of the following statements which you believe to be true. Put a minus sign to the left of each of the following statements which you believe to be false. If you do not know whether a statement is true or false, put nothing to the left of it. If you believe a statement to be partly true and partly false, put a minus sign to the left of it.

1. The invention of printing, the fall of Constantinople, and the growth of secular interests following upon the Crusades were important causes of the Revival of Learning.

2. The attitude towards the classics as educational material in both Italy and Northern Europe passed through the two stages of Broad and Narrow Humanism.

3. Except for the change from municipal to state control, the gymnasium of Sturm was identical with the present-day institution of the same name in Germany.

4. The chief secondary schools of England, Germany, and France to-day embody the stress on religion and the classics which is their heritage from the Renaissance and Reformation.

5. Luther in his *Letter* and in his *Sermon* expounded a conception of compulsory education different from that incorporated in the Massachusetts Law of 1647.

6. Elementary education benefited little from the Reformation in England because the movement came much later there than on the continent and enthusiasm for elementary education had spent itself.

7. The existing European schools took slight notice of the Realistic tendency, but it found lodgment in new types of schools such as the academies, the realschulen, and the University of Halle.

8. Locke and Comenius stood directly opposed on the question of pansophism.

9. Locke may be regarded as an eclectic in his educational theory.

10. The complete ladder system of schools outlined in Comenius' Great Didactic has been realized in America to-day.

11. In their emphasis on physical education, on contemporary foreign languages, and on moral training, Locke and Montaigne closely resembled one another.

12. It is possible to trace the influence of Rabelais on Montaigne, of Montaigne on Locke, and of Locke on Rousseau.

13. The academy in America differed from the academy in England because it was not an institution to train ministers, it did not stress Latin and Greek, and it was usually open to girls as well as boys.

14. The Society of Jesus was founded in 1540, more than a century and a quarter before the Christian Brothers.

15. While the *Conduct of Schools* is rigidly prescriptive, it has been frequently amended. Hence the Christian Brothers, unlike the Jesuits, have been able to modify their educational work to keep pace with new demands.

16. Anglican neglect of, as well as Catholic, Lutheran, and Calvinistic interest in, elementary education showed themselves in the American Colonies. ✓

17. The "field" schools of the South afforded the only opportunity for the education of the poorer classes. ✓

18. The American school of the three R's developed out of the early separate schools, one for writing and arithmetic, the other for reading.

19. The town school of Massachusetts began to decline with the rise of religious toleration, because then people not of the Congregational Church refused to send their children to the Congregational schools.

20. Federal land grants, begun in 1802, led to a rapid development of common (elementary) schools in all the newer states.

21. New York was the first state to establish a state educational board and to set up a state superintendent of schools. ✓

22. The form which state subsidy of education has usually taken in America has been the granting of money from a state fund to local communities provided these communities match in whole or in part the state grant.

23. Since the movement inland of the population followed in a general way parallels of latitude, Michigan was slow in developing a state school system.

24. While sectarianism delayed the development of public schools in many places, it really accelerated it in New York City.

25. By the time Horace Mann left office in Massachusetts (about 1850) the district system had been abolished, three state normal

schools had been established, the state school fund had been doubled, to name but a few of his reforms.

26. The powers of the Massachusetts Board in Mann's time resemble closely those of the United States Bureau of Education to-day.

27. Basedow succeeded better than Francke in bringing the upper and lower classes together in the schools.

28. Spencer resembles Rousseau in his attitude towards punishment by natural consequences, the hardening process, and the extensive use of scientific content in education.

29. The increase in the per capita wealth in America after the Civil War, led to the passing out of the Pestalozzian-Fellenberg influence on higher education here.

30. The poverty following upon the industrial revolution in England brought into the field of charity education such organizations as the S. P. G. and the Sunday School Society.

31. The primary department of our American school system had its roots in the infant school movement of the first half of the nineteenth century.

32. Pestalozzi's principle "from the simple to the complex" has had a permanent influence on such subjects as arithmetic and geography; but it has been superseded in its application to such subjects as music and drawing.

33. The Pestalozzian movement in America between 1820 and 1860 was imported from Prussia; that from 1860 on was imported from England.

34. The germ of the culture epochs theory seems to have been formulated by Ziller; Herbart developed and elaborated it.

35. Froebel and Montessori are in agreement as to the aim and fundamental principle of method in the education of young children, they differ on the matter of social participation.

36. There is at present no legal obstacle in any of the states to the establishment of public kindergartens.

37. The amendment which went to the voters of Michigan in November, 1920, would, if passed, have put the schools of that state on the same basis as those of France so far as religious education is concerned.

38. Our federal government has spent large sums of money on vocational education through the Morrill, Smith-Lever, and Smith-Hughes Acts.

39. The Jansenists and Rousseau stood at opposite extremes in their view of the child's instincts and impulses.

40. Throughout the colonial period, the women who taught in the elementary schools were untrained for the work. This condition prevailed until the establishment of the first state normal schools.

41. Pestalozzi's influence on vocational education in America has shown itself along three lines:

- (1) trade training for juvenile delinquents,
- (2) woodwork in the upper grades of the elementary schools,
- (3) manual labor in theological and other higher schools.

42. Until 1833, the British government spent nothing on elementary education, between 1833 and 1870 it made disbursements through private organizations, only since 1870 has it made grants to be spent by public boards of education.

43. Luther's appeal for religious education under public support and control has found realization in Germany. In England, France, and America, public support and control have been achieved only through complete secularization.

44. The Illumination prepared the way for Rousseau through its attack on authority and on existing institutions. It foreshadowed Rousseau also in its demand for betterment of the conditions of the peasants and workers.

45. Locke was an advocate of formal discipline, but he did not adduce the doctrine to support the position of Latin in the curriculum.

46. Dewey's criticism of the Herbartian "method whole" is based upon the fact that it is a lecture method, giving the child no opportunity to apply the knowledge he has gained.

47. The French lycée, the German gymnasium, and the English public school are essentially vestibules to the university. The American high school, on the other hand, has a two-fold function to discharge: (1) to prepare students for college, (2) to give additional training to those not going to college.

48. Oberlin and Owen were much nearer the present-day conception of infant education than was Wilderspin.

49. Beneath the educational theory of Pestalozzi lay the faculty psychology conception; Herbart, however, developed a theory independent of this conception.

50. Mulcaster, like Erasmus and Luther, strongly espoused the study of the vernacular in the schools.

REFERENCES

CHAPTER I

* Before titles indicates source material.

Duggan, S. P.—*History of Education*, Chapter I.

Graves, F. P.—*History of Education Before the Middle Ages*, Chapter I. Not to be confused with the same author's abridged *History of Education* in one volume.

Laurie, S. S.—*Pre-Christian Education*, pp. 1-8.

CHAPTER II

Graves, F. P.—*History of Education Before the Middle Ages*, Chapter IV (Egypt), Chapter VII (China), Chapter VIII (India), Chapter IX (Persia).

Laurie, S. S.—*Pre-Christian Education*, pp. 38-48 (Egypt), pp. 104-151 (China), pp. 157-177 (India), pp. 178-195 (Persia).

Monroe, P.—*Textbook in the History of Education*, Chapter II (China). Not to be confused with the same author's *Brief Course in the History of Education*.

CHAPTER III

*Cubberley, E. P.—*Readings in the History of Education*, Reading No. 27 (Maxims from the Talmud).

Duggan, S. P.—*History of Education*, Chapter II.

Graves, F. P.—*History of Education Before the Middle Ages*, Chapter XI.

- Laurie, S. S.—*Pre-Christian Education*, pp. 65-100.
Spiers, B.—*The School System of the Talmud*.
Swift, F. H.—*Education in Ancient Israel Before 70 A. D.*

CHAPTER IV

- Cubberley, E. P.—*History of Education*, pp. 16-37 (Old Greek), pp. 39-50 (New Greek). Not to be confused with the same author's *Brief History of Education*.
*Cubberley, E. P.—*Readings in the History of Education*, Readings No. 1, 4, 6, 8, 9, 10, 11.
Graves, F. P.—*History of Education Before the Middle Ages*, pp. 149-157 (Sparta), pp. 157-170 (Old Athenian), pp. 170-214 (New Athenian), pp. 214-228 (Cosmopolitan).
Laurie, S. S.—*Pre-Christian Education*, pp. 283-295 (Higher Education).
Mahaffy, J. P.—*Old Greek Education*, Chapter III (Physical Education), Chapter VIII (Sophists and Socrates), Chapter X (Plato and Aristotle), Chapter XI (University of Athens).
Monroe, P.—*Textbook in the History of Education*, pp. 67-102 (Old Greek), pp. 102-160 (New Greek), pp. 160-172 (Cosmopolitan).
*Monroe, P.—*Source-Book of the History of Education, Greek and Roman Period*, pp. 66-91 (Aristophanes' *Clouds*), pp. 109-115 and 138-221 (Plato's *Republic*).
Walden, J. W. H.—*Universities of Ancient Greece*, pp. 48-57, 197-217.
Walsh, J. J.—*How Old the New*, Chapter II (University of Alexandria).

CHAPTER V

- Cubberley, E. P.—*History of Education*, pp. 53-78.

- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 12, 18, 20, 24, 25, 26.
- Graves, F. P.—*History of Education Before the Middle Ages*, pp. 236-243 (Purely Roman), pp. 243-270 (Greco-Roman).
- Laurie, S. S.—*Pre-Christian Education*, pp. 301-411.
- Marique, P.—*History of Christian Education*, Volume I, pp. 13-17.
- Monroe, P.—*Textbook in the History of Education*, Chapter IV.
- *Monroe, P.—*Source-Book of the History of Education, Greek and Roman Period*, pp. 428-444 (Cicero), pp. 451-509 (Quintilian).

CHAPTER VI

- Cubberley, E. P.—*History of Education*, pp. 82-98.
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 28, 29, 39-42.
- Drane, T.—*Christian Schools and Scholars*, Chapter II (Great Britain and Ireland).
- Graves, F. P.—*History of Education Before the Middle Ages*, pp. 272-294.
- Marique, P.—*History of Christian Education*, Volume I, pp. 17-24, pp. 36-42.
- McCormick, P.—*History of Education*, pp. 65-69 (Pedagogy of Christ), pp. 69-85 (Patristic Period).
- Monroe, P.—*Textbook in the History of Education*, pp. 221-243.
- *Painter, F. V. N.—*Great Pedagogical Essays*, pp. 144-149 (Jerome's Letter on Female Education).

CHAPTER VII

- Cubberley, E. P.—*History of Education*, pp. 150-164 (Monastic), pp. 140-146 (Carlovingian Revival).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 43, 54, 60, 62, 64, 69, 71, 73, 74.

- Graves, F. P.—*History of Education During the Middle Ages*, Chapter II (Monastic), Chapter III (Carlovingian Revival), Chapter IV (Revival under Alfred).
- Marique, P.—*History of Christian Education*, Volume I, pp. 70-90, 92-103.
- McCormick, P.—*History of Education*, pp. 88-92 (Monastic), pp. 94-102 (Carlovingian Revival).
- Monroe, P.—*Textbook in the History of Education*, pp. 243-274 (Monastic), pp. 274-279 (Carlovingian Revival).
- *Painter, F. V. N.—*Great Pedagogical Essays*, pp. 159-168 (Selections from Maurus' *Education of the Clergy*).

CHAPTER VIII

- Cubberley, E. P.—*History of Education*, pp. 186-199 (Rise of New Studies), pp. 213-235 (Universities).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 91, 102, 113, 114, 123, 124.
- Graves, F. P.—*Education During the Middle Ages*, pp. 50-60 (Scholasticism), Chapter IX (Universities).
- Laurie, S. S.—*Rise and Constitution of Universities*, pp. 172-235.
- Marique, P.—*History of Christian Education*, Volume I, pp. 111-115, 118-121, 137-141, 155-160, 161-172, 176-178, 185-199.
- Monroe, P.—*Textbook in the History of Education*, pp. 292-313 (Scholasticism), pp. 313-327 (Universities).
- *Norton, A. O.—*Readings in the History of Education*, pp. 49-75 (Civil and Canon Law), pp. 13-25 (Abelard), pp. 115-124 (Disputation).
- Parker, S. C.—*History of Modern Elementary Education*, pp. 24-31 (Rise of a Vernacular Education).

CHAPTER IX

- Adams, G.—*Civilization During the Middle Ages*, Chapter IX (Feudal System).
- Cubberley, E. P.—*History of Education*, pp. 164-169 (Chivalry), pp. 180-186 (Saracenic).
- Cubberley, E. P.—*Readings in the History of Education*, Readings No. *79 (Chivalry), 85-86 (Saracenic).
- Graves, F. P.—*Education During the Middle Ages*, Chapter VII (Chivalry), Chapter V (Saracenic).
- Monroe, P.—*Textbook in the History of Education*, pp. 284-291 (Chivalry), pp. 331-334 (Saracenic).

CHAPTER X

- Cubberley, E. P.—*History of Education*, pp. 202-211 (Rise of Burgher Class).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 96-99.
- Graves, F. P.—*Education During the Middle Ages*, Chapter X (Types of Schools), Chapter VIII (Friars).
- McCormick, P.—*History of Education*, pp. 116-130 (Scholastic Writings), pp. 142-148 (Religious Orders of the Scholastic Period).
- Monroe, P.—*Textbook in the History of Education*, pp. 330-331 (Friars).

CHAPTER XI

- Cubberley, E. P.—*History of Education*, pp. 241-252 and 263-268 (Italy), pp. 268-284 and 252-260 (Northern Europe).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 125, 135 (Italy), 136 (Collège), 137 (Gymnasium), 138 (Grammar School), 144 (Narrow Humanism).

- Duggan, S. P.—*History of Education*, pp. 113-120, (Italy), pp. 120-128 (Northern Europe).
- Graves, F. P.—*History of Education During the Middle Ages*, Chapter XIII (Italy), Chapter XIV (Northern Europe).
- Monroe, P.—*Textbook in the History of Education*, pp. 351-361, 364-370, 376-377, 388-389 (Italy), pp. 361-364 (Contrast of Movement in Italy and Northern Europe), pp. 377-385 (Northern Humanists), pp. 390-397 (Northern Schools).
- Woodward, W. H.—*Education During the Renaissance*, pp. 10-23 (Vittorino da Feltre), Chapter VI (Erasmus).

CHAPTER XII

- Cubberley, E. P.—*History of Education*, pp. 312-326, 330-335, 351-354.
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 156-158 (Luther), 161 (Melanchthon), 173, 174 (England), 176 (Holland), 179 (Scotland), 180 (Jesuits), 182 (Christian Brothers).
- Duggan, S. P.—*History of Education*, Chapter IX.
- Graves, F. P.—*History of Education During the Middle Ages*, Chapter XV (Protestant Reformation), Chapter XVI (Catholic Reaction).
- Hayes, C.—*Political and Social History of Modern Europe*, Volume I, pp. 164-169 (Summary of Religious Revolution).
- Marique, P.—*History of Christian Education*, Volume II, Chapter V (Protestant Reformation), Chapter VI (Catholic Revival).
- McCormick, P.—*History of Education*, pp. 211-231 (Protestant Reformation), pp. 232-244 (Catholic Reaction).

Monroe, P.—*Textbook in the History of Education*, Chapter VII.

*Painter, F. V. N.—*Great Pedagogical Essays*, pp. 171-186 (Selections from Luther's Letter to the Mayors and Aldermen).

Schwickerath, R.—*Jesuit Education*, Chapter IV (Ratio Studiorum), Chapter V (Work before the Suppression), Chapter VII (Nineteenth Century Work).

Note: Catholic Writers—Hayes, Marique, McCormick, Schwickerath. Non-Catholic Writers—Cubberley, Duggan, Graves, Monroe, Painter.

CHAPTER XIII

*Comenius, J. A.—*Great Didactic* (Keatinge Translation), Chapter XVI (Basic Principles of Method), Chapter XXVI (School Discipline), Chapter XXVII Fourfold Division of Schools).

Cubberley, E. P.—*History of Education*, pp. 385-395 (Scientific Movement), pp. 408-416 (Realistic Theory), pp. 416-425 (Effect on Schools).

*Cubberley, E. P.—*Readings in the History of Education*, Readings No: 209, 211, 212 (Milton), 214, 215 (Montaigne), 221 (Comenius), 208 (Bacon).

Graves, F. P.—*History of Education During the Middle Ages*, Chapter XVII (Humanistic and Social Realism), Chapter XVIII (Sense Realism), pp. 299-305 (Francke and Pietism).

*Milton, J.—*Tractate on Education*, All.

Monroe, P.—*Textbook in the History of Education*, pp. 442-478 and 480-496 (Realistic Theory), pp. 496-502 (Effect of Sense Realism on the Schools).

*Montaigne, M.—*Essay on the Education of Children*, Passim.

*Painter, F. V. N.—*Great Pedagogical Essays*, pp. 258-277 (Comenius' *Great Didactic*).

Parker, S. C.—*History of Modern Elementary Education*, Chapter VI.

CHAPTER XIV

*Cubberley, E. P.—*Readings in the History of Education*, Readings No. 216, 217, 227, 228.

Duggan, S. P.—*History of Education*, Chapter XII (Locke as a Rationalist).

Graves, F. P.—*History of Education During the Middle Ages*, pp. 305-311 (Locke as Rationalist and Disciplinarian).

*Locke, J.—*Thoughts Concerning Education*, Passim.

Monroe, P.—*Textbook in the History of Education*, Chapter IX (Locke as a Disciplinarian).

Quick, R. H.—*Educational Reformers*, pp. 219-238.

CHAPTER XV

Cubberley, E. P.—*History of Education*, Chapter XV (Colonial), pp. 519-527 and 653-674 (Transition), pp. 615-633 (Philanthropic Movements in England).

*Cubberley, E. P.—*Readings in the History of Education*, Readings No. 180, 191, 202 (Colonial), No. 297, 298 (Monitorial Schools).

Cubberley, E. P.—*Public Education in the United States*, Chapters I, II, especially pp. 28-37. (Colonial).

Duggan, S. P.—*History of Education*, pp. 336-348 (Transition).

Graves, F. P.—*History of Education in Modern Times*, Chapter IV (Colonial and Transition), Chapter III (Philanthropic Movements in England and America).

Knight, E. W.—*Education in the United States*, Chapter V (Colonial), Chapters VI and VII (Transition).

- Parker, S. C.—*History of Modern Elementary Education*, pp. 101-107 (Monitorial System).
Reisner, E. H.—*Nationalism and Education Since 1789*, pp. 323-337 (Historical Background to 1830), pp. 337-367 (Transition).

CHAPTER XVI

- Boyd, W.—*Educational Theory of Jean Jacques Rousseau*.
Cubberley, E. P.—*History of Education*, pp. 478-486 (Eighteenth Century France), pp. 530-533 (Rousseau).
*Cubberley, E. P.—*Readings in the History of Education*, Readings No. 264 (Emile), 265, 266 (Basedow).
Graves, F. P.—*History of Education in Modern Times*, Chapter II.
McCormick, P.—*History of Education*, pp. 312-321.
Monroe, P.—*Textbook in the History of Education*, Chapter X.
Parker, S. C.—*History of Modern Elementary Education*, Chapter VIII (Rousseau and the Illumination), Chapter IX (Rousseau's Emile).
Quick, R. H.—*Educational Reformers*, Chapter XIV (Rousseau), Chapter XV (Basedow).
*Rousseau, J. J.—*Emile*, Book I especially.

CHAPTER XVII

- Cubberley, E. P.—*History of Education*, pp. 539-547 (Pestalozzi), pp. 759-764 (Herbart), pp. 764-772 (The Kindergarten Idea).
*Cubberley, E. P.—*Readings in the History of Education*, Readings No. 267-270 (Pestalozzi), 272 (Fellenberg), 355-357 (Herbart), 358 (Froebel).
*Froebel, F.—*Mother Play*, Passim.

- Graves, F. P.—*History of Education in Modern Times*, Chapter V (Pestalozzi), Chapter VII (Herbart and Froebel), pp. 381-387 (Montessori).
- Monroe, P.—*Textbook in the History of Education*, pp. 587-594 (Characteristics of the Psychological Movement), pp. 597-622 (Pestalozzi), pp. 622-639 (Herbart), pp. 639-667 (Froebel), pp. 667-673 (Effect of the Psychological Movement on the Schools).
- Painter, F. V. N.—*Great Pedagogical Essays*, pp. 372-382 (Selections from *Froebel's *Education of Man*).
- Parker, S. C.—*History of Modern Elementary Education*, Chapter XIII (General Treatment of Pestalozzi), Chapter XIV (Pestalozzi and Industrial Education), Chapter XV (Object Teaching and Oral Instruction), Chapter XVI (Pestalozzian Formalism), Chapter XVII (The Herbartians), Chapter XVIII (The Froebelians).
- *Pestalozzi, H.—*Leonard and Gertrude*.

CHAPTER XVIII

- Cubberley, E. P.—*History of Education*, pp. 772-779 and 795-805.
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 362, 363.
- Duggan, S. P.—*History of Education*, Chapter XV.
- Graves, F. P.—*History of Education in Modern Times*, pp. 320-351.
- Monroe, P.—*Textbook in the History of Education*, Chapter XII.
- *Spencer, H.—*Education*, especially Chapter I, "What Knowledge is of Most Worth?"

CHAPTER XIX

- Cubberley, E. P.—*History of Education*, pp. 689-693 (Fight for Free and Non-Sectarian Schools), pp. 700-702 (Fight for High Schools).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 316, 322, 328, 350.
- Graves, F. P.—*History of Education in Modern Times*, Chapter VI (Public School Revival), Chapter VIII (Since the Revival).
- Knight, E. W.—*Education in the United States*, Chapter VIII (Public School Revival).
- Painter, F. V. N.—*Great Pedagogical Essays*, pp. 385-398 (*Mann's Last Annual Report).
- Reisner, E. H.—*Nationalism and Education Since 1789*, pp. 378-413 (Period 1830-1860), pp. 425-462 (Period 1860-1890).

CHAPTER XX

- Cubberley, E. P.—*History of Education*, Chapter XXII (Prussia-Germany), pp. 588-603 (France), pp. 633-650 (England).
- *Cubberley, E. P.—*Readings in the History of Education*, Readings No. 277-281 (Prussia-Germany), No. 284-290 (France), No. 299, 302, 303, 304 (England).
- Graves, F. P.—*History of Education in Modern Times*, pp. 276-292 (Prussia-Germany), pp. 293-301 (France), pp. 301-310 (England).
- Reisner, E. H.—*Nationalism and Education Since 1789*, (A) For Prussia-Germany: pp. 129-139 (Period 1806-1840), pp. 162-175 (Period 1840-1870), pp. 184-200 (Period 1870-World War), pp. 215-218 (Since the War). (B) For France: pp. 9-32 (French Revolution), pp. 33-42 (Napoleon I), pp.

54-62 (Loi Guizot), pp. 68-78 (Napoleon III), pp. 79-118 (Third Republic). (C) For England: pp. 221-242 (Period to 1832), pp. 243-272 (Period 1832-1867), pp. 273-299 (1867-World War), pp. 300-319 (Fisher Act).

Roman, F. W.—*The New Education in Europe*. (A) For Germany: pp. 182-185 (Constitution of 1919 on Education), pp. 186-224 (Post-War Changes in Education). (B) For France: pp. 120-138 (Post-War Changes in Education), pp. 139-149 (Some Reform Proposals). (C) For England, pp. 45-60 (Fisher Act and its Aftermath).

INDEX

A

Abelard, 58, 59
 Academy, in America, 114, 115,
 127, 131; in England, 114, 169;
 in France, 114, 115
 Act of Uniformity, 91, 114
 Adages of Erasmus, 80
 Address to Philanthropists, 145
 Albertus Magnus, 58, 69
 Alcuin, 54-55
 Alexandria, University of, 33-34,
 41
 Alfred the Great, 54-56
 Anselm, 58
 Archimedes, 18
 Aristophanes, 26
 Aristotle, 26, 29-31, 47, 60, 75,
 109; *Ethics*, 30; *Lyceum*, 29;
Organon, 18; *Politics*, 30
 Ascham, 82, 87
 Athens, University of, 33-34, 41
 Averroës, 65, 66
 Avicenna, 64, 66

B

Bacon, Francis, 100, 103, 107, 109-
 110, 145, 165
 Bacon, Roger, 58, 62, 69, 110
 Balfour Act, 183-184
 Barnard, 173, 174
 Basedow, 145-146, 162, 165
 Bell, 134, 135, 182
 Benedict, Rule of, 52
 Beth ham-Midrash, 15
 Blow, Susan, 138, 160, 164
 Board of Education, New York
 City, 130
 Board of Regents (University of
 the State of New York), 129,
 180

Boëthius, 53
 Brahminism, 5, 7
 Brethren of the Common Life
 (Hieronymians), 78, 79, 81
 Brinsley, 85
 British and Foreign Society, 134,
 135
 Budaëus, 81
 Buddhism, 5, 10
 Bugenhagen, 89, 90
 Burgher schools, 70-71

C

Calvin, 87, 90
 Capella, 53
 Carter, James G., 171-172
 Catechetical schools, 45, 49, 50
 Catechumenal schools, 48
 Cathedral schools, 49, 59, 61
 Cato, 39
 Charlemagne, 54-55, 66
 Chinese education, 6, 8, 9, 10
 Christ as a teacher, 46-47
 Christian Brothers, 96-100
 Chrysoloras, 75-76
 Church Fathers, 50
 Cicero, 39, 43, 53, 75, 84
 Ciceronianism, 85
 Ciceronians of Erasmus, 80, 85
 Colet, 80, 83, 87
 Collège, 81, 85, 86, 115, 180; de
 France, 81; de Guyenne, 81; de
 Montaignu, 79; in Switzerland,
 90
 Colloquies of Erasmus, 80
 Comenius, 103, 104, 110-113, 145,
 161
 Conduct of Schools, 98, 99, 100
 Conduct of the Understanding,
 119

Confessions, 141
Confucius, 6
Corderius, 81, 87, 90
Council of Trent, 92, 98, 126
Court school of Italy, 76-78, 82, 84, 85, 86
Cousin, Victor, 180-181
Culture epochs theory, 156, 157, 158, 167
Cyropedia of Xenophon, 26

D

De Institutione Oratoria, 43-44
De Oratore, 30, 43
Descartes, 96, 107, 165
Dewey, 143, 156, 158, 160
Diderot, 140
Dominicans, 54, 69
Donatus, 46
Duns Scotus, 58, 69

E

École maternelle, 138, 163
Education of Spencer, 166
Education of Man, 159
Egyptian education, 5, 7, 9, 10
Einheitschule, 180
Elementarie, 108
Elementarwerk, 145
Elyot, 82, 87
Émile, 141-143
Epictetus, 39
Epicureanism, 32
Episcopal schools, 49
Erasmus, 78, 79-81, 82, 83, 85, 87
Essay on the Education of Children, 106; on **Pedantry**, 106
Ethics of Aristotle, 30
Euclid, 18

F

Fellenberg, 152, 162
Fénelon, 101
Fisher Act, 184
Forster Act, 124, 183
Franciscans, 54, 69, 125
Francke, 114, 116-118, 147
Franklin, 115, 127
Free School Society (N.Y.C.), 130, 135
Froebel, 113, 136, 138, 144, 152, 158-164, 167, 171

Fürstenschulen, 78, 83-84, 85

G

Gargantua and Pantagruel, 104
Gemara, 15
Gnosticism, 32
Gorgias, 25
Governour of Elyot, 82
Grammar schools of England, 85, 86, 91, 116, 121, 184
Grammaticus, school of the, 40
Gratian, 61, 62
Great Didactic, 110
Guild schools, 70
Gymnasium (ien), 83, 84, 85, 86, 94, 115, 168, 177

H

Harris, William T., 138, 164, 167
Harvard College, 128
Herbart, 154-158
Hindu education, 4, 7, 9, 10
How Gertrude Teaches Her Children, 149
Huxley, 144

I

Illuminati, 121, 140
Infant schools, 136-138, 163
Infant School Society, 137
Inerius, 61
Isidore of Seville, 53

J

Jansenistic education, 88, 92, 94, 96-97, 100
Janua Linguarum Reserata, 113
Jefferson, 129
Jesuits, 92-97, 100, 106
John the Scot, 55
Joshua ben Gemala, 15
Journal of Education (Barnard), 173

K

Kilpatrick, 160
Kindergarten, 137, 138, 159, 161-162, 163-164, 179
Kings College (Columbia), 126
Knox, 90
Klosterschulen, 84

L

Lancaster, 134, 135, 182
 La Salle, 98, 99
 Latin Grammar School in America, 85, 86, 125, 127, 131
 Laws of the Twelve Tables, 37, 38, 41
 Leonard and Gertrude, 149
 Litterator, school of the, 40
 Livius Andronicus, 38
 Locke, 104, 106, 107, 119-122, 142, 162, 165, 167
 Loyola, 93
 Ludus, 39, 40
 Luther, 81, 87, 88-90
 Lycée, 169, 180
 Lycurgus, 20
 Lyon, Mary, 176

M

Mann, Horace, 124, 153, 167, 172-173, 174
 Mantua, Court School at, 76-78
 Marcus Aurelius, 39
 Marenholz-Bülow, Baroness von, 138
 Massachusetts Common School Journal, 172
 Medieval universities, 59, 60-63, 78, 79
 Melancthon, 78, 83, 84, 87, 89
 Methodenbuch, 145
 Methodus Nova, 110
 Milton, 103, 104-06
 Mishna, 16
 Monitorial schools, 134-136
 Montaigne, 103, 104, 106-107, 120, 142, 167
 Montesquieu, 140
 Montessori, 161
 Morrill Act, 175
 Mother Play and Nursery Songs, 159, 160
 Mulcaster, 100, 103, 108-109

N

Napoleon I, 144, 145, 152, 169, 178, 180, 182
 National Society (Bell), 134, 135
 Neander, 90
 New Atlantis, 109

New Heloise, 141
 Nominalists, 57-58
 Novum Organum, 109

O

Oberlin, 136-137, 138, 161
 Oberrealschule, 168, 179
 Orbis Pictus, 113, 146
 Oswego Movement, 153, 167, 171
 Outlines of Educational Doctrine, 154
 Owen, 137, 138, 161

P

Palestra, 20
 Pancratium, 21
 Pansophism, 108, 110, 113, 146
 Pantænus, 49
 Peabody, Elizabeth, 138, 163
 Persian education, 6, 8, 9, 10
 Pestalozzi, 136, 143, 144, 147, 148, 149-153, 158, 162, 165, 168, 171, 177
 Peter Lombard, 58, 59, 62
 Petrarch, 74-75, 81
 Philanthropic movement, 144-147, 165
 Philo the Jew, 32
 Pietists, 114, 116-118
 Plato, 26, 28-29, 31, 47; the Academy, 28; the Republic, 28
 Politics of Aristotle, 30, 43
 Port Royalists, (see Jansenistic ed.)
 Positions of Mulcaster, 108
 Praise of Folly, 80
 Prelection, 95, 97
 Priscian, 46, 113
 Prodicus, 25
 Protagoras, 25
 Public school (England), 86, 91, 184
 Public School Revival, 115, 124, 171-173
 Public School Society, (see Free School Society, N. Y. C.)
 Pythagoras, 26

Q

Quadrivium, 29, 53, 62, 77
 Quintilian, 43-44, 82

R

Rabanus Maurus, 55
 Rabelais, 103, 104
 Raikes, 133
Ratio Studiorum, 93, 99
 Ratke, 103, 110
 Realgymnasium (ien), 168
 Realists, medieval, 57-58; modern, 85, 102-114, 120
 Realschule, 114, 117, 165, 168, 179
 Rein, 157
Republic of Plato, 28, 43, 76
 Reuchlin, 78, 83
 Rhetor, school of the, 40
 Rhodes, 41
 Ritterakademie, 114, 115
 Rome, University of, 41
 Roscellinus, 58
 Rousseau, 104, 106, 121, 140-145, 161, 162, 165, 167

S

Scholasticism, 50, 57-60
Scholemaster of Ascham, 82
 Seneca, 39
Sentences of Peter Lombard, 58, 62
 Seven Liberal Arts, 53
Sic et Non, 59
 Smith-Hughes Act, 175
Social Contract, 141
 Socrates, 26-28
 Sopherim (Rabbins), 15
 Sophists, 24-26, 31
 S.P.C.K., 133, 135
 Spencer, 144, 165, 166-167
 S.P.G., 133
 Stoicism, 32, 33, 39

Sturm, 78, 84-85, 87, 89, 100
 Suetonius, 43
Sum of Theology, 58
 Sunday schools, 133-134

T

Tacitus, 43
 Technische Hochschulen, 168
 Thomas à Kempis, 78
 Thomas Aquinas, 58, 69
 Thorndike, 160
Thoughts Concerning Education, 119
Tractate on Education, 104-106
Treatise on the Education of Girls, 101
 Trivium, 53, 62, 77
 Trotzendorf, 89

V

Vedas, 5
 Vittorino da Feltre, 76-77
 Vives, 87
 Volksschulen, 177, 178, 179
 Voltaire, 140
 Vorschule, 86, 180

W

Wilderspin, 137, 138
 Willard, Emma, 176
 William and Mary College, 126

X

Xenophon, 26

Z

Zend-Avesta, 9
 Ziller, 157

RECENT TRENDS IN EDUCATION

BY

PHILIP R. V. CUROE, PH.D.

HUNTER COLLEGE, NEW YORK CITY

INTRODUCTION BY

STEPHEN P. DUGGAN, PH.D.

DIRECTOR OF THE

INSTITUTE OF INTERNATIONAL EDUCATION



GLOBE BOOK COMPANY

175 Fifth Avenue

New York, N. Y.

Copyright 1932
by
GLOBE BOOK COMPANY, Inc.

PRINTED IN THE UNITED STATES OF AMERICA

Digitized by Google

PREFACE

This study of Recent Trends in Education is designed to supplement the author's History of Education. It purposes to bring to the attention of prospective teachers, teachers-in-service, and others interested in educational developments, a critical account of the outstanding post-war trends both in Europe and in the United States.

It has been prepared in the belief that a compact evaluation of these trends is indispensable for one who would get his bearings in the swift-moving current of contemporary education.

The book has three major objectives. The first of these is to give a systematic analysis of the major trends in present-day American education in the following fields: administration, methods and curriculum, measurement and, elementary, secondary and higher education. This analysis may be used for initial orientation as well as for recapitulation following a study of the carefully selected references provided.

The second objective is to interpret the significance of the work of such leaders as Dewey, Thorndike, Terman, Bagley, James, Hall, Bode, Judd and Watson. This interpretation is based upon their chief writings and upon their experimental contributions and is related to the analysis made under the first objective. It is planned to serve as an introduction to further study of their work and to direct profitable reading therein.

The third objective is to present an account of the recent trends in France, England and Germany, constantly associating these with similar or counter-movements in the United States.

P. R. V. C.

*New York,
December, 1932*

INTRODUCTION

Few persons today would dispute the statement that the World War ended an era in the history of modern civilization. During the nineteenth century, three great principles of social organization became the pillars upon which western civilization rested viz.: nationalism, democracy and capitalism. Today, no one of them escapes severe criticism and although nationalism is still rampant, democracy and capitalism are undergoing profound changes. The generation born into the world since the Great War lives in a different spiritual atmosphere from that of its predecessor.

The revolutionary changes brought about by that terrible catastrophe have been felt in every field of human thought and endeavor. Dynastic overturns, political realignments, social upheavals, economic depression, spiritual despair have fast followed upon one another until it seemed to some philosophers that a disintegration of modern civilization was imminent similar to that which closed the classical era. However, very slowly the process of disintegration has been halted and mankind has begun, feebly it is true, but surely, the process of reconstruction. It has been a terrible experience but just because of its terrible nature, it has impressed upon mankind some lessons that will probably never be forgotten.

Mankind, in the West at least, is organized into nations. Before the War, loyalty to the nation was taken

for granted, was more or less blind, and was based chiefly upon sentiment. The War discovered to every nation the defects of its social organization. Some found their recruits undersized, undernourished, and physically unfit for action. Others learned that the ignorance consequent upon educational neglect prevented their soldiers from participating efficiently in a struggle which required to so large an extent the intelligent handling of modern war apparatus. Still others found out for the first time that political and economic oppression had engendered in their troops an attitude approaching disloyalty. All men learned that the War had not been a struggle between combatant armies but between "nations in arms."

Never before, therefore, has there been such a zeal for the welfare of the whole nation. Men have been taxed as never before so that the individual citizen, old and young, should not starve physically or mentally. New forms of political, social, and economic organization have been adopted, primarily to integrate individuals and groups of individuals into a unified whole. Amidst the conflict of views and interests in every nation, legislation since the War in practically every country has had in view the enabling of the individual to become a better person. Some emphasized his individuality more than others, but all regarded him as the chief asset in the national resources whose welfare was of paramount importance.

Where was this welfare best stimulated? In the school, the only institution in which the State had no competitor in control. Upon the school new burdens were placed: health education and physical training to enable the individual better to conserve his physical resources; new elements in the curricula to develop

him as a more capable economic unit; reforms in school organization to give the children of the masses, who were formerly prevented, the opportunity to take the place in society justified by their capabilities; improvement in methodology to discover differences in capacity and provide the right training indicated; adult education, so that latent ability undiscovered for lack of opportunity might have the chance for development.

The story of this ferment in education since the War is a fascinating one, fascinating in the difference in approach resulting from difference in national temperament, equally fascinating in the unity of aim disclosed everywhere, viz.: the welfare of the individual as the nation's greatest asset. In no other book for students of the history of education have the educational results of the movement been told so clearly, so adequately, and so convincingly and yet in such small compass as in this volume of Professor Curoe's. It is a privilege to be permitted to recommend it to every student of the subject.

Stephen P. Duggan.

TABLE OF CONTENTS

CHAPTER I. FRANCE

	PAGE
The Status of Religious Schools.....	1
The Problem of the École Unique.....	2
Elementary Education	3
Secondary Education	4
The Training of Teachers. Primary Teachers. Secondary Teachers	6
Physical Education	9
Higher Education	9

CHAPTER II. GERMANY

The Problem of the Common School.....	11
Nationalism in Education.....	12
The Problem of Religious Education.....	13
Kindergarten Education	14
Elementary Education	15
Intermediate Education	18
Secondary Education	19
Teacher Training. Primary Teachers. Secondary Teachers....	22
Higher Education	24

CHAPTER III. ENGLAND

The Religious Question.....	26
Pre-Primary Education	28
Elementary Education	28
Secondary Education	30
Teacher Training. Elementary Teachers. Secondary Teachers..	32
Higher Education	35

CHAPTER IV. AMERICAN EDUCATION

Administration. Federal Governmental Activity.....	38
The Erection of Complete State Systems of Education. State School Officers. The Cost of Public Education. The Status of Private Schools. The Downward Extension of the Elementary Schools. The Downward Extension of Secondary Education. The Upward Extension of Secondary Education.....	40

	PAGE
Higher Education	45
Training of Teachers.....	46
Compulsory Attendance. The Extent of Compulsory Attendance. Federal Action. State Action.....	48
Method and Curriculum. The Project Movement. First Meaning. Second Meaning. Third Meaning. Practical Effects....	50
The Trend Against Class Organization. The Dalton Plan. Winnetka Plan. Comparison of the Dalton and Winnetka Plans. The Gary (Platoon, Work-Study-Play) Plan.....	53
The Measurement Movement. Origins. Uses. The Chief Controversy. Achievement Measurement.....	59
Contemporary Educational Leaders. John Dewey. Edward L. Thorndike. Lewis M. Terman. William C. Bagley. William James. G. Stanley Hall. Boyd H. Bode. Charles H. Judd. John B. Watson.....	62

CHAPTER V. NEW TYPE QUESTIONS

True-False Questions. Post-War Developments.....	76
Matching Test. Post-War Developments.....	80
True-False Questions. American Education.....	82
True-False Questions. Contemporary Educational Leaders.....	84
Matching Test. Recent American Trends.....	87
Index	89

RECENT TRENDS IN EDUCATION

CHAPTER I

FRANCE

The World War found the educational system of France probably the most highly centralized in the world. It was essentially a two-class system, elementary and higher elementary schools for the great masses of the people, *collèges* or *lycées* and universities for the few. Since the War, France like all countries deeply affected by it, has included its educational system in the wider program of reconstruction and stock-taking. Some of the most important problems which have arisen in this process will be briefly considered.

THE STATUS OF RELIGIOUS SCHOOLS

The vicissitudes of French political life from the Revolution to the Law of 1904 show the persistent nature of the problem of the position of private schools in a highly state-controlled system. France has not gone the full distance in making education a state monopoly which portended in the second decade of the Third Republic. Yet the anti-clericalism of the early struggle survives in the prohibition against members of religious congregations teaching in private schools. This regulation has been in force for over twenty-five years. There is a growing movement, too, as in the United States, to require teachers in private schools to meet

2 RECENT TRENDS IN EDUCATION

the same standards of preparation as those met by the public school teachers. This has now reached the stage of requiring the *brevet élémentaire*. This certificate is obtained by success in an examination covering the work of the higher elementary schools. Since teachers in the state schools must have in addition the *brevet supérieur* based on the work of the normal school course, it will be seen that a disparity still exists between the standards set by the state for its own schools and for private schools. This situation is akin to that in even the most severe American states.

THE PROBLEM OF THE ÉCOLE UNIQUE

The gap between the primary and secondary school tracks, coupled with the difficulty in transferring from one to the other, has long constituted a limitation on equality of educational opportunity in France. Bottom to top, primary and secondary education have run parallel; the first has not led into the second. Even before the War, a system of state and municipal scholarships in *lycées* and *collèges* mitigated somewhat this feature of French education, and this policy has been continued. But out of 150,000 students, boys and girls, attending *lycées* and *collèges* (1927), not more than 20,000 held scholarships.

The proposed remedy is the *école unique* (common school), which aims to provide a basic elementary education for all children regardless of social class up to a certain age. After this age, differentiation will take place, some entering secondary, others various types of higher elementary schools, with liberal scholarship provisions.

The proposal has made little progress, owing in part to financial difficulties. It has met, too, opposition from leading spokesmen of the French secondary schools,

who desire to conserve the traditions and methods "consecrated by long experience." The fear from this quarter is that there may be hastily substituted for the present selective factor a lowering of standards, and a confusion of secondary education for general culture and university preparation with higher primary and technical education. This objection, in sum, is not to the common school as a vestibule, but rather to the extension of the idea to a common secondary school.

ELEMENTARY EDUCATION

There have been no revolutionary changes in the French theory and practice of elementary education since the War. As before, this part of the school system consists of the elementary primary schools (6 to 13), and the superior or higher primary schools which continue education to 16 or 17.

The minimum age of leaving the elementary primary school has been raised from eleven to twelve years since 1923, and the requirements for the certificate of elementary studies (*certificat d'études élémentaires*) have been somewhat stiffened.

The attendance at the higher primary schools has increased, and there have been some changes in the examination for the *brevet élémentaire* to adjust it along lines of special vocationalized types of higher primary schools. But it is a striking fact that fundamental structural reforms advanced during the War have not fructified. Outstanding among these was the continuation school bill of 1917 (cf. Fisher Bill in England). This embodied the aspirations of those who would greatly extend educational opportunity for adolescents, and compel its acceptance. In general, it provided part-time continuation schooling to twenty years of age for boys and to eighteen for girls not attending full-time

4 RECENT TRENDS IN EDUCATION

schools. The difference between the revolutionary promise of this bill and the rather minor changes in elementary education actually achieved, is a measure of France's let-down during the years since the War.

SECONDARY EDUCATION

The basic structure of French secondary education remains unimpaired by reconstruction. The two forms of schools are the *lycées*, supported entirely by the state, and the *collèges*, maintained chiefly by the local communal authorities.

The policy of attaching higher primary schools to *collèges* was begun about 1926 by some communes. This means that traditional secondary education pointing toward the baccalaureate is given in the same institutions as technical and other forms of higher primary education. However, at first an important difference existed between the two types of students; the higher primary students had free tuition, while the secondary students paid fees. But in 1927 M. Herriot, Minister of Public Instruction, requested the Government to introduce free tuition in all sections of the mixed institutions, secondary or otherwise. The contest was acute. This was tantamount to proposing free secondary education in lieu of a policy of scholarships, however liberal. The opponents of the proposal cited the tremendous burden of expense involved. Herriot answered that as things stood, the proportion of the cost of secondary education borne by the payment of fees was less than one-fourth. The remainder fell upon the taxpayers. Hence it was society at large which provided the children of the well-to-do the opportunity for secondary education. According to this view, a further sacrifice of 58 million francs a year out of public moneys would make secondary education free and accessible to all

properly qualified students. A recent law embodies, with compromise, the goal of these efforts. It provides for the abolition of fees in the sixth year of the *lycée* beginning in February, 1931. The following year, the fifth class will be made free, and so on, so that in 1936 the *lycée* will be wholly free.

Recent years have shown a further victory of the *modernists* over the classicists in the secondary field. The decree of Minister Bérard (1923) requiring a common course of four years, with Latin and the elements of Greek compulsory for all, was attacked on the ground that it would close higher education to all unable to pursue the classics. The principle was rejected in 1924, and in 1927 the modernists gained a further victory in having Greek made optional even in the classical section.

Increasing provision for the secondary education of girls has followed two main lines of development. The first is the admission of girls to boys' *collèges* in towns with no such institutions for girls. This is a sharp break from the French tradition against co-education on the secondary level, and only financial considerations have allowed it to make any headway in the face of sharp opposition. The second line of development is the improvement of the course in the independent girls' secondary schools. In 1924, the course in the girls' *lycées* was increased from five to six years. More important than this, however, is the fact that the diploma from these extended schools opens the way to the university, as it did not under the shorter course. An increasing number of female students are ambitious to continue their studies in the universities, while a decreasing number are pointing toward the *brevet supérieur*, the certificate necessary to appointment as a teacher in the elementary schools.

In the internal economy of French secondary education, a much controverted question concerns the method of teaching French. This problem obtruded itself as a result of the policy of combining classical and modern sections under the same teachers for common subjects, to insure an identical training (*l'amalgame*). In working this out, the Latinists and their schoolfellows were brought together for the study of French. This arrangement was condemned by the conference of secondary school teachers in 1926. The classicists, driven from their main position of compulsory Latin for all in 1924, have taken up the second line of defense; namely, that at least for those who have begun Latin, it is the apotheosis of bad method to teach French without recourse to the language from which it is directly derived. The proponents of *l'amalgame*, on the other hand, point out that until recently, instruction in French language and literature in girls' secondary schools was self-sufficient, and that the results justify the method. In *collèges* and *lycées* with small enrollments, the practice of combining modern and classical students under the same teachers is of obvious administrative advantage, and this factor, rather than theoretical considerations will probably settle the question.

THE TRAINING OF TEACHERS

The provisions for teacher-training, both for the primary and secondary schools, are of long standing in France and are quite resistant to precipitate change. Some post-War tendencies in this field with their implications, however, are worthy of note.

Primary Teachers.—The elements in the structure for training primary teachers laid down by the *Loi Guizot* (1833) are still in force. These required that such teachers should be prepared in normal schools,

one of which was to be established for each sex in each department. To-day, France supports 88 normal schools for each sex.

Two proposals have been made to change this structure. The first is to abolish the normal schools altogether, and to assign the task of training primary teachers to the secondary schools. This would in itself constitute a phase of the more fundamental *école unique* proposal, but it has received scant support. The second is to reduce the number of departmental normal schools and to build up regional schools located in university centers, where candidates for teaching might avail themselves of the opportunity to take some university work. It is not likely that this second proposal will make much headway.

In 1920 the normal school course underwent complete revision in line with the thesis that "above all else the teacher must be an educated man." Educational psychology, sociology, ethics, and philosophy of science were given an important place alongside of the *content* and more strictly professional training subjects. This cultural enrichment is the more significant when it is remembered that the normal school in France trains indifferently for a variety of types of elementary teaching; e.g., work in the *écoles maternelles* (children 2 to 6), in the whole range of the *écoles primaires élémentaires* (children 6 to 13), and in the *cours complémentaires*, which are classes for higher elementary education annexed to an elementary school.

As for the training of teachers in service, France has not developed such a multiplicity of agencies as America. Corresponding to the American teachers' institutes are the annual educational conferences held in each canton. At these, the inspector of primary instruction addresses the teachers, and some special prob-

lem of methodology announced in advance is discussed by the conference. Within the past few years, this work has been somewhat supplemented by the organization on a district basis of professional associations of teachers for the interchange of ideas and teaching experiences.

Secondary Teachers.—As before the War, the professors in boys' *lycées* are university trained men, who hold in addition the *agrégation*, a certificate only to be obtained in a severe annual competitive examination. In the communal *collèges*, the teacher must hold at least the *licence*, roughly equivalent to a master's degree in the United States.

An outstanding post-War tendency is in the direction of raising the requirements for teaching positions in girls' secondary schools. Before the War, for example, the *agrégation* was not necessary for appointment to a girls' *lycée*. Since 1924, when the course in this type of school was expanded, there has been increasing demand that the training of the teachers who staff these schools should be correspondingly strengthened. The official attack on the problem was to amend the *agrégations* for women, so that they would more nearly approximate those for men. By about 1938, all *agrégations* will be common to both sexes. It is hoped to make this certificate a requirement for all teachers in girls' *lycées*, thus establishing identical requirements for professorates in these (state) schools for both sexes.

Slight concessions have appeared in recent years with respect to a cardinal point in the French theory of secondary school teacher-training. The French idea has always been that such teachers must be first and last scholarly men and women. *Education* in the American sense has had practically no place in their preparation. The years since the War have produced no

important shift from this position. However, a regulation of 1924 requires that candidates for the *agrégation* must spend three weeks in a class of a *lycée* under the supervision of the class professor, and must attend conferences at which secondary education in France and abroad are treated.

PHYSICAL EDUCATION

All the belligerent countries faced the revelation of the tremendous extent of physical disability in their nationals. It was inevitable that reconstruction programs should recognize the problem of increasing national physical well-being, and that the schools should be considered of strategic importance for this purpose. In France, the continuation school bill of 1917 provided that one-third of all the time required be devoted to physical and military exercise for boys, and to physical exercise, lessons in hygiene, practical medicine and care of children for girls. While this bill did not become law, it nevertheless revealed that post-War France was alive to the need for part-time instruction for adolescents in the field of health and physical conservation.

Since 1923, too, two hours weekly for physical education are required in all elementary schools. The form of this activity is left to the local authorities, but the tendency is to put stress on scientific gymnastics, rather than on *unregulated pursuit of sports*. One authority warns that the latter would be accompanied by serious consequences for adolescents.

HIGHER EDUCATION

It was in 1896 that the so-called *faculties* acquired corporate existence and the name of universities. There are now seventeen of these institutions, including those of Algiers and Strasbourg, all under state control, with

the professors appointed by the national Minister of Public Instruction.

Since the War, the number of students in the various faculties (law, science, letters, medicine, and pharmacy) has increased rapidly. The return of Alsace to France has brought back into the French university system the University of Strasbourg, with its faculty of theology.

The students entering these universities come chiefly from the secondary schools. Complaints have been made that they are heterogeneous in ability, and it has been proposed that an additional year of preparation for university work be required on graduation from the secondary schools. This would make for greater maturity—the French student is modally about 17 years of age when he enters the university—and would provide specialized curricula according as a student planned to devote himself to literature, history, philosophy, or some other field of study.

CHAPTER II

GERMANY

Germany underwent important political changes in the wake of the World War, as France did not. The governmental structure shifted from a monarchical to a republican basis. This involved a new constitution (1919) which in Articles 142 and 149 laid down some educational postulates. It stated that the Reich may define the guiding principles for education in the states, including those for higher education. But in practice the Reich has been slow to enact legislation in pursuance of the constitutional grant of power. It is fearful that it will have to assume the cost of any mandatory provisions it may enact. Hence, in practice, the various states have acted along different lines. Bavaria especially has proceeded independently of steps taken in common by other states under the influence of Prussia. There is no such uniformity as characterizes the centralized system of France.

THE PROBLEM OF THE COMMON SCHOOL

In pre-War Germany, the great majority received their education in free elementary schools (*Volksschulen*), while the privileged minority attended the secondary schools. Supporters of democratization have long fought for a unitary school (*Einheitsschule*), which would offer a common basic education to all regardless of social position.

In 1920, in line with its constitutional powers, the government of the Reich passed a law abolishing the

old three-year private schools preparatory to secondary education (*Vorschulen*), and allowing until 1930 for the substitution of *Grundschulen*. This, on paper, was a complete triumph for the democratizers. But powerful forces opposed this law. Much capital was invested in these *Vorschulen*, and besides, the question of state monopoly was involved. As a result, in 1927 the federal government virtually repealed the 1920 law, stating that "Until the conditions are defined by federal law, closure or gradual dissolution shall be discontinued."

Yet many *Vorschulen* have been closed, and the *Grundschule* is functioning in most of the eighteen states of the Reich. Upper-class parents have employed subterfuges to continue their children in private schools—physical weakness, etc.—or under tutors. They are not easily converted to the concept of a school for all the people. Generally speaking, the common school prospers under Socialist governments, and declines when governments of the Right come into power in the various states.

NATIONALISM IN EDUCATION

Before the War, on both sides of the Rhine, the schools were utilized to develop a psychology of patriotism. History was pressed into service to justify the Third Republic or the Hohenzollern kings and emperors, geography to capitalize Alsace-Lorraine as the *lost provinces* or the German lands gloriously regained in 1870, depending on the point of view. Germany, vanquished in the War, renounced her Hohenzollerns and with them the old basis of patriotism. Some official pronouncements since the revolution are of interest as indicating the present nationalistic note in German education.

The republican constitution required that "moral education, civic sentiment, and personal professional service in the spirit of German patriotism and international reconciliation are to be striven for in all the schools." In 1927 the Reichstag requested the government to urge the states to examine history textbooks to determine whether the constitution was being obeyed. Especially was history to be watched to see the attitude assumed toward Austria. International reconciliation meant specifically the Greater Germany idea, the uniting at least spiritually, of Germany and Austria.

In Prussia, the Ministry of Instruction in 1927 ordered the song books revised to give expression to the spirit of the Republic, and issued compulsory regulations for the celebration of Constitution Day. The next year the same Ministry issued a regulation to insure that the League of Nations and its work receive attention in school instruction.

Organizations of students at the universities suspected of being antagonistic to the Republic have attracted hostile official attention. Thus, the nationalistic *Deutsche Studentenschaft* was disbanded by the Prussian Ministry (1927) on the ground that it had become anti-Semitic, was not neutral in politics, and did not respect the new state and all that it signifies.

THE PROBLEM OF RELIGIOUS EDUCATION

For many years before the War, the elementary schools of the German states were so organized that religious instruction according to the communion of the majority of the children, with provision for religious minorities, was a regular part of the curriculum. "It has been as much a matter of course that the German child should be taught in the public schools the religion of his parents as that he should be taught the German

language or arithmetic." (Reisner) But there was no intimation that sovereignty in education was to be vested anywhere but in the state, no suggestion of any multiple system of schools, some evangelical, some Catholic, some secular, on the English pattern.

In 1926, however, a coalition of the Catholic Center with the German People's Party introduced into the Reichstag legislation to split the elementary schools along denominational lines. This proposal carried with it a return of clerical participation in determining courses of study, textbooks, etc. for religious instruction, and was met with stormy opposition. The bill was defeated in 1927. A compromise plan for an interdenominational school, with denominational religious instruction elective, has been rejected by clerical groups, and the whole question is still being agitated.

KINDERGARTEN EDUCATION

Germany was the birthplace of the kindergarten, yet since its suppression in Prussia in 1851, it has never become a corporate part of German public education. Those that exist are mostly private institutions, frequently under church auspices. Since the War, however, there has been an increasing tendency to assist these private ventures out of public funds. There is some confusion as to their purpose; i.e., whether it is essentially child welfare work or school preparation. The Froebelian philosophic justification seems not to be prominent in the discussion at all.

A proposal to make attendance at them compulsory was rejected in 1920, and financial difficulties are a constant check to their development.

As to methodology in the schools that exist, the claims of the followers of Montessori are put forward against those of the Froebelians. There are but four

Montessori schools, and they have no imitators. One German writer states that "there can be no doubt that Germany will not throw Froebel overboard." In Berlin, where the Pestalozzi-Froebel House is the center for the preparation of kindergartners, a genuine attempt is being made to conserve what is valuable in the Froebelian approach, while incorporating the findings of recent studies in pre-school psychology.

ELEMENTARY EDUCATION

Administratively, the most important attempt to reorganize elementary education in post-War Germany, the drive for the *Grundschule*, has already been dealt with. In the internal spirit and practice of the schools, some striking trends are discernible, some of them similar to those in America.

The most significant is probably the development of what the Germans call the *Arbeitsschule*, the school based on child growth through activity, as opposed to the school based on passive absorption. The philosophy from which this movement stems is quite like Dewey's; German educators recognize in it a return to Froebel and Pestalozzi, and a rejection of Herbart. But they are not agreed on its exact connotation. Some interpret *activity* as motor activity, others as activity of the mind as shown in locating problems, attempting solutions, checking results, etc., with motor activity present, but not as the distinctive feature of the new methodology.

The *Arbeitsschule* idea is a sharp break from the conception of elementary method which prevailed in the schools from the beginning of the period of reaction (1840) to the World War. In practice, the German elementary school child hung upon the words of his teacher, who carefully developed the lesson, questioned

his pupils on its salient points, and drilled them upon what was to be retained. Even textbooks and reading references, so common in American schools, were little employed. The teacher was the text. Hence this post-War tendency toward self-active learning is an important departure from historical antecedents.

Another noteworthy trend is that toward integrated instruction (*Gesamtunterricht*). It is substantially the same as the American stir for an activities curriculum rather than a subject curriculum. It may be regarded as a corollary of the agitation for the *Arbeitsschule*, and in practice is appearing chiefly in the lower classes, i.e., in the *Grundschule* for children six to ten years of age. In some states, it has been introduced by law. Germany, with its strong Herbartian tradition, was ready for the principle of correlation which is presupposed by the *Gesamtunterricht*, but waited upon the quickening influence of the doctrine that placed growth through activity before the teaching of subjects as the basic aim of education. The fusion of these two, correlation and the activity school, has yielded the concept of integrated instruction.

It is interesting that the same objections are being raised in Germany as in America against such curriculum revision. Its opponents point out that in such curricula the fundamental skills—writing, reading, etc.—are neglected. These cannot be taught by any treatment incidental to central purposed activities.

A third trend, akin to the other two, is the insistence in German theory on the development of children's powers as the central aim of teaching. Administrative devices which reflect this insistence are the policy of attracting men trained in the Youth Movement into the schools, and the general adoption of the policy of giving the same class of children to the same teacher for

three or four successive years. The first is intended to counteract the intellectualistic tradition of the teaching function, and the second to facilitate the study of child maturing and to enrich personality contacts.

A fourth trend concerns school discipline. Recent years have seen a tendency in Germany to return to Pestalozzi and the spirit of the early nineteenth century—*benevolent superintendence*. In some states (e.g., Saxony, Thuringia, Mecklenburg), corporal punishment has been forbidden by law. In Prussia, the Ministry has advised teachers to refrain from it entirely for girls, and in the lowest classes for boys. The old Comenian distinction between bad conduct and poor work has been pressed anew, and the Prussian authorities urge the complete discontinuance of repressive discipline as a corrective for the latter. Instead, the German leaders are trying to remove the administrative and teaching conditions which made coercive discipline so common in the past.

A fifth trend is revealed in the scepticism of German educational leaders concerning the value of mental and achievement testing. A limited use of standardized testing instruments is made for purposes of transfer of handicapped children to special schools (*Hilfsschulen*). There is, however, general unwillingness to segregate gifted children, on the ground that such segregation lessens the opportunity to develop in them such moral traits as the spirit of service to weaker brethren. At present in Germany, too, there is a strong reaction against a *psychology of the part* and a demand for a *psychology of the whole*. The crystallized form of this reaction is the pattern of Gestalt psychology, which attempts to treat human personality as a unity. The practical influence of this is to make sparing use of intelligence tests, which definitively neglect factors of emo-

tion and will, and to regard ability as a complex integration of psychological dispositions and functions, impossible of discovery by a few objective performances. An extreme official attitude on the question is embodied in a Prussian ruling prohibiting classification of children in order of merit, even on a group basis.

Finally, the increasing participation of parents' councils (*Elternbeiräte*) in education since the Revolution may be noted. In the United States, the parent-teachers association is a familiar phenomenon, but in Germany before the War, the minutiae of education were so regulated from above that the opinion of parents could with difficulty make itself felt, and hence remained unorganized. To-day, teachers conduct evening meetings with these parents which serve a double purpose: first, to explain to them the new methods, especially those of the *Arbeitsschule*, and second, to solicit their advice and to gain their support in securing the material needs of the schools.

INTERMEDIATE EDUCATION

In 1872, under Bismarck, there was added to the German school structure a new type of school, the middle school (*Mittelschule*). It came to meet the demands of a social class unable to pay the fees of the secondary schools but unwilling to have their children educated with those of the artisan and laborer. Hence its course was more extended than that of the elementary school and its fees were smaller than those of the secondary school. A great victory was won by its proponents when the examination for the one-year military service privilege was opened to its graduates.

The middle school never attained great importance in German education. In Prussia, for example, before the War, only three-tenths of one percent. of the people

received their education in this type. Since the War, its supporters, the lower middle classes, seem to be fighting a losing battle. The collapse of the one-year military service provision, with its accruing social prestige, has been one disintegrating factor; the lessening of social stratification is probably another. An acute controversy has developed with the secondary schools around the demand that middle school graduates (at about the end of the ninth school year) be admitted to the secondary schools without examination. Secondary school spokesmen object on the ground that "the work of the middle schools is not academic and their conception of education is wholly quantitative." One index of the decline of the middle school is to be found in the statistics of the number of candidates for its teachers' examination. In 1913, there were over 1000; in 1925, there were 327.

SECONDARY EDUCATION

At the advent of the War, German secondary education was organized into three major types of nine-year schools: the *Gymnasium*, the *Realgymnasium*, and the *Oberrealschule*. These were attended by the upper middle and professional classes, and were the only direct road to matriculation at the universities. The differences among them were chiefly curricular; the *Gymnasium* revolving around the classics, the *Oberrealschule* around the scientific subjects, and the *Realgymnasium* embodying a compromise between the two. It is in this secondary field that the most revolutionary tendencies have occurred since the War. In addition to the attempt to base secondary education on the *Grundschule* instead of on the private selective *Vorschule*, several other trends must be noted.

Two new types of secondary schools have appeared

beside the three historic types. These are the *Deutsche Oberschule* and the *Aufbauschule*. The first aims to develop its work entirely around German cultural life past and present, but under pressure of university requirements is compelled to teach two foreign languages. The *Aufbauschule* is designed to facilitate transfer from the elementary to the secondary school.

The *Aufbauschule* is important as an administrative measure to widen educational opportunity for capable children of the lower social classes, especially in the rural districts. It is a six-year school based on seven preceding years of elementary education, and is able to prepare its students in these six years for the university. If this is compared with the old structure—three years in the *Vorschule* and nine in the secondary school—or with the structure now existing where the *Vorschule* has disappeared—four years in the *Grundschule* and nine in the secondary school—it is evident that the new arrangement postpones the beginning of secondary education longer. This enables parents to keep their children at home longer, a decided advantage economically.

The development of these *step-up* schools has been most rapid in Prussia, where there were 74 for boys and 11 for girls in 1927. In Bavaria and Baden, on the other hand, their growth has been retarded, partly because in these states admission to the universities is denied to graduates. Wherever the old elementary normal schools have been closed (see page 22), the physical plant for the *Aufbauschule* is available, and its growth has been correspondingly accelerated.

Since the War there is a drift away from the *Gymnasium* and *Realgymnasium* where Latin is strongly entrenched. In general, English is taking the place of Latin as the first foreign language. French is declining,

while Spanish is being studied by increasing numbers, frequently being obligatory in the great port cities like Hamburg and Bremen.

There is agitation to make the later years of the secondary school course more flexible and to bring them more into line with the needs of modern life. The causative factors at work here are not unlike those operating in the United States. Since only about 55% of secondary school graduates enter the university, some German leaders believe that these schools should cease to submit to university prescriptions. There is wide difference of opinion and a variety of experimentation as to the degree and nature of this differentiation. The alignment rests on two opposing philosophies. The first would place the thorough study of definite fields of culture according to the type of school in the foreground, fearing a loss of *cultural unity* in any plan of wide election. The second would disrupt the traditional classification of schools according to curricula, and would provide for the aptitudes and needs of the surviving students in the upper classes.

It is a striking fact that Germany, with the economic strain of reconstruction and reparations upon her, is attempting to broaden opportunity for secondary education by reducing its cost to parents. While fees are still required in the secondary schools of all states, an increasing percentage of free places is being made available to capable students. Further, the Constitution itself provided maintenance grants (cf. Fisher Act in England), which are monthly contributions to parents to meet the cost of maintenance of their children at school. In Prussia, for example, 71½% of the tuition fees are used for this purpose.

TEACHER TRAINING

Germany was a pioneer in the training of elementary school teachers. In the great reorganization following the defeat by Napoleon, and under the inspiration of Pestalozzi, Prussia built into her educational structure a system of normal schools (*Lehrerseminaren*) which greatly influenced the French development (1833) and the first American normal schools (1838). The other German states followed Prussia's lead throughout the nineteenth century. In the secondary field, the teacher has been himself a secondary school graduate with eight semesters of university training and two probationary years of teaching during which he received his theoretical professional training under the rector of the secondary school. Since the War, reorganizations have occurred, especially in the elementary field, some of them embodying demands voiced by the teaching profession since 1849.

Primary Teachers.—The republican Constitution of 1919 provided that the training of teachers was to be uniform throughout the Republic, according to principles that apply to higher education. But the federal government here, as in the case of the *Grundschule*, has been slow to act, and the states have proceeded independently. This has led to variety in the systems which have supplanted the pre-War normal schools, and has militated against the uniformity intended by the Constitution. The normal schools have now been closed in all states except Bavaria and Württemberg, which continue them unchanged. In the other sixteen states, the prevailing organization requires graduation from a secondary school, followed by at least two years of professional preparation in a university or *technical high school*, and in a pedagogical institution connected with it.

The significance of this change lies in the fact that the road is at last opened for university contacts for those who are to teach the young of Germany, just as it has always been for secondary school teachers. They may now spend two formative years at the *sources of intellectual life*. In addition, the choice of teaching as a profession need no longer be made at fourteen; it may be postponed until the end of the secondary school period—about nineteen years of age. This brings the German organization much closer to the American, except, of course, that the normal school in America is still a thriving institution.

In theory, attendance at any type of secondary school qualifies as a preliminary education for elementary school teachers. But it is probable that in practice, the two new types, the *Deutsche Oberschule* and the *Aufbauschule*, will best meet the needs of the candidates, because German national culture is the core of their work as it is not in the other secondary schools.

Concomitantly with the provision of a university background before appointment, have gone experiments in teacher self-government after appointment. Saxony illustrates an astonishing extreme in this field. Saxon teachers elect their own principal, who works with a teachers' council. This council has the deciding voice in general management, course of study, time schedule, etc. Even in Prussia the principal has been shorn of some of his prerogatives, and has been officially told that he is no longer the superior of his teachers. This democratization of the teaching profession is a tender plant in the German states. It thrives best under governments of the Left; it wilts considerably when shifts to the Right occur.

Secondary Teachers.—There has been no important innovation in the training of secondary school teachers

in Germany since the War. As in France, the pre-service period is devoted almost exclusively to academic work, but unlike France this is followed by careful study of educational theory and psychology during the two years of probationary teaching.

It is not unlikely that the establishment of pedagogical institutes at universities for the training of elementary teachers will in time affect the training of secondary teachers. The latter spend eight semesters at the universities; the institutes are there. Already, teachers' organizations have been urging a thorough preparation in pedagogy and an early introduction to the work of secondary teaching. But so far only Saxony has established the requirement that candidates for secondary school teaching posts follow a course of lectures in the university in education and child study, and in special methods of teaching the subjects selected.

HIGHER EDUCATION

The German university, beginning with the founding of Berlin (1809) has nurtured a tradition of scholarship and research. It has remained largely impervious to the shock of the Revolution, and is regarded by the political Left as a center of reaction.

Of the post-War tendencies already discussed, the university tends to oppose (1) the differentiation of the secondary schools away from the three historical types, and (2) the pressure to supply more professional training for elementary and secondary teachers. From the standpoint of the university, secondary education is preparatory; it cannot without danger to scholarship temporize with demands for wide electivism and semi-vocational courses. Here is the impasse which all educational systems face when increasing democracy and response to sociological need conflict with efficiency. In connection with the second university position, the

unwillingness to give professional teacher training, the argument advanced is that the university exists for scientific research; therefore, scholastic training in definite skills should be provided in institutions other than universities. In the German organization the technical schools (*Technische Hochschulen*), really of university grade, have been the institutions where advanced professions conspicuous for the skill elements have been cared for. Many university spokesmen would assign the function of teacher-training to them. In actual practice some states (e.g., Hesse, Brunswick, Saxony) have utilized these technical schools rather than the universities for their new systems of preparing elementary school teachers.

Since the reorganization of Prussian education in the early nineteenth century, graduation from recognized secondary schools has been the only road to university study. It is therefore significant that the University of Berlin has since the War set up an examination for admission without the secondary school graduation certificate. The applications for this privilege have been numerous, and have been subjected to a rigorous sifting process.

Increasing numbers are enrolling at the German universities. This is in part a world phenomenon, but among the special causative factors in Germany are the broadening of the pathway to the university—especially through the *Aufbauschulen*—and the admission of prospective elementary school teachers to university courses. The resulting increase in university trained people (the estimate is for 30,000 in 1932-33) has been a disturbing factor to German leaders. There is much discussion of the problem of the *academic proletariat* and many professional organizations are warning against entrance to their fields.

CHAPTER III

ENGLAND

The War found England alone of the three European nations here considered with a dual system of schools; i.e., with a system in which private and often denominational schools shared with public schools in both the national and local disbursements. The administrative areas set up in the Act of 1902 continued to conduct this dual system. In the Fisher Act (1918) a program was mapped out which would make for more munificent contributions, national and local, to the enrichment of educational opportunity for the masses of the British people, but with the same dual system. Since the War, with the vicissitudes incumbent upon shifts from conservative to labor governments, the execution of the provisions of the Fisher Act have been weak and strong respectively. Education in England proceeds in the main by compromises, and the most important of these since the War will now be considered.

THE RELIGIOUS QUESTION

This has its roots deep in historic soil in England. The Forster Act (1870), the Balfour Act (1902), and the Fisher Act all recognized the contribution made to national education by religious philanthropy. They were in the spirit of supplementing, rather than of displacing this contribution. Hence both provided (public, secular) and non-provided (private, denominational) schools continue to share the function of educating on the elementary level, just as local secondary

public and various types of endowed schools divide the secondary field.

There has been, however, since the War, an attempt to effect a fuller assimilation of non-provided schools into the general elementary system. This has followed two lines. The first of these is a flank attack on the denominational schools involving an inspection of the premises of all types of aided elementary schools by Board of Education inspectors. This has resulted in the listing of some of them as so inadequate that they should no longer be recognized for national aid. As a result, it is hoped by opponents of the dual system that the denominations which own such buildings will not be able to bear the expenditure involved in their renovation, and that they will thus pass into the category of provided schools. The second approach is more ingenuous and conciliatory. It involves a proposal to transfer or lease all non-provided schools to the public educational authorities on condition that religious instruction acceptable to the various denominations be supplied either by different teachers in the school or by teachers supplied by the denominations. There are serious obstacles to the realization of this plan. Teachers' associations are sensitive to any plan involving the *right of entry* of the clergy into public schools. Roman Catholics, for the same reasons familiar to informed Americans, will not endorse any proposal which would deprive them of their own schools.

It should be noted that these attempts to construct a unified elementary system in England involve in no way the right of denominational and other private schools to existence. What they do involve is the principle that public moneys should be spent only upon schools completely under public authority, the principle virtually assured success in America by the New York

precedent (1842). England is too thoroughly committed to the policy of safeguarding variety within the framework of her national system to crush private initiative in education.

PRE-PRIMARY EDUCATION

At the outbreak of the World War, it was a common matter for *under-fivers* to be in attendance at English elementary schools. Two groups, for quite different reasons, have attempted to correct this situation. Those who are primarily interested in economic retrenchment have tried to reduce the government grants to each locality by the amount now credited to children under five. This has aroused strong protests in the industrial areas and has not been put into effect. Others believe that the practice should be discontinued because conditions in the elementary schools are physically and psychologically harmful to children of such tender ages. Any hope of constructive development lies with this second group. Its leaders support the separate nursery school, providing a program of habit formation, constructive activity, and training of the imagination, developed on open-air lines. But the movement is growing slowly. At present, there are only about thirty nursery schools in England, a large proportion of them in London.

ELEMENTARY EDUCATION

The attempt to fuse provided and non-provided schools into one system is perhaps the most significant trend in the elementary field in England. But there are some other aspects of elementary education since the War which should be noted.

There is a persistent attempt to lengthen the period of compulsory education. Since 1922, no exemptions

from attendance are to be granted before fourteen years of age, and the influential *Report of the Consultative Committee on the Education of the Adolescent (Hadow Report, 1927)* has recommended that this be raised to fifteen in 1932. But the provision of the Fisher Act for compulsory part-time schooling to eighteen still remains for future accomplishment. A few local authorities have established voluntary part-time schools for working children; e.g., London, where 3% of the boys and girls 14 to 16 are in attendance. England is marking time here. The program of part-time attendance is being held in abeyance until the period of full-time education has been further extended. This has long been a plank in the educational platform of the Labor Party.

The curriculum and methods of the English elementary schools show certain leavening forces at work. In England, only the broad features are ever laid down by educational authorities, and hence great scope is given to the head teacher. As a consequence, timid head teachers depart but little from the beaten path; the bolder are constantly testing out new procedures. Of the latter, practical work of some kind is gaining prominence in many schools or in centers which serve groups of schools. There is also a shift to various plans of individual work (Dalton, Howard, etc.) instead of class teaching, especially for older pupils. There is a percolation to the elementary level of features long associated with upper-class secondary education, features of enriched social and corporate life. School games and excursions, prefects, school magazines, old scholars' days and the like are becoming parts of the school life of working-class boys.

In contrast to the implications of *integrated instruction* in Germany and the project movement in America

the recent movement in England is strongly toward the study of special rather than of general methods of instruction. There is a growing conviction that "each subject has its own genius which should be expressed in the presentation even of its simplest elements." Symptoms of this viewpoint are numerous; the old post of *master of method* is disappearing from institutions for teacher-training, methods books covering the whole curriculum are composite efforts, each section being written by an expert in some subject-matter field, the major controversies in method center around the teaching of special subjects. As illustrative of the last of these symptoms, is the wide interest in the issue of print-writing (manuscript writing) versus the cursive hand. The arguments adduced by the parties to this dispute are similar to those known to American teachers of writing.

In 1924 the Consultative Committee of the Board of Education issued its report on *Psychological Tests of Educable Capacity*. The publication of this report and the discussion subsequent to it point clearly to the increasing place that mental and other tests will occupy in teaching and administration. But here as elsewhere English education is conservative, and there is not the same faith as in America that educational problems can be solved by the technical methods of psychology. Mental tests are used in connection with the selection of children for transfer to secondary schools (usually local secondaries); less often are achievement tests resorted to as a means of grading children.

SECONDARY EDUCATION

There is nothing in England which can be called a *system* of secondary education. There is, instead, a range of types of secondary schools, from the aristo-

cratic *public* schools, through endowed grammar schools to the most recent and most democratic type, the local secondary schools begun under the Balfour Act (1902). Only the last of these corresponds to the American concept of a public secondary school in its basis of support and control, in its student personnel, and in its relation to elementary education. Down to the War, the other types were in substance private schools, some of them enjoying a degree of public financial support. No significant change in this structure has occurred since the War. Here as in the elementary field there may be said still to exist a *dual system*. But within this system recent years have witnessed some reorientations.

Between 1902 and the War, the free local secondary schools increased rapidly in numbers. Since the War, this increase has not been maintained. Instead, the tendency has been to augment the number of free places in grant-earning schools; i.e., those endowed private schools which receive national money on condition that they open a stipulated number of places to capable poor children. There are now about forty percent. free places in these schools. In addition, in line with a provision of the Fisher Act, small maintenance allowances may be given to pupils over fourteen whose parents need them.

There is a renewal of interest in providing better adapted opportunities for those children who cannot profit by the literary and scientific curricula of existing secondary schools. The *Hadow Report* tied up this problem with the more fundamental one of the reorganization of all education of children between 11 and 15. This report recommended the abolition of the existing overlap between elementary and secondary education. Constructively, it aimed to organize various types of *post-primary education* between 11 and 15,

which latter age by 1932 was to become the minimum school leaving age for all. At the beginning of the post-primary period, a decision would be made as to whether a child should attend a secondary school (in the traditional sense) or some other type of post-primary school emphasizing realistic and pre-vocational elements. This report, in effect, would postpone secondary education proper until 15, and it would further make transfer from one to another type of post-primary education easy.

There is little likelihood that the oldest and most exclusive of the secondary schools, the *public* schools, will apply for government grants and the requirement of free places which these entail. As a matter of fact, this type of school has increased since the War, and most of them have long waiting lists for admission.

In England, the normal route to the older universities is by way of the endowed secondary schools, while admission to the newer universities is open to those who have been prepared in the local secondary schools. But in either case, since boards appointed and controlled by the universities prepare the leaving examinations for the secondary schools, the curriculum of the latter is indirectly controlled by university admission requirements. Since the War, secondary education in England is serving a wider clientele than ever before. Only about 5% of those who take the leaving examinations enter universities. Thus the secondary schools are finding it difficult to respond in their work to new sociological requirements, and it is not unlikely that this university domination will be bitterly contested.

TEACHER TRAINING

Teacher-training in England was at first carried on by the philanthropic societies, especially the monitorial

societies, with the help of state subventions. Beginning in 1890, this national aid was granted to training departments in the universities, and in 1902 local authorities opened their own training colleges. When the War came, these three agencies divided the field of elementary teacher-training among them. As for the training of secondary school teachers, no planned system existed at all at the outbreak of the War. In 1913, the vast majority of the men and more than one half of the women teachers were not specifically trained for secondary teaching. Those that were so trained had received their preparation in the training departments of universities, which had really been founded to prepare elementary school teachers.

Elementary Teachers.—The history of elementary school teacher-training in Great Britain has moved from the apprenticeship idea to that of conscious professional training. The turning point came in 1902. Previously young children thirteen years of age were apprenticed for five years as student teachers. This was really an indenture accompanied by a small salary. Some instruction in the curriculum subjects was given these young apprentices in the evening. When the first normal schools in the American sense did appear, they offered a two-year course built upon the completed five-year apprenticeship. In 1902, with the opening of training colleges by the local authorities, the standards were drastically revised upward. Soon thereafter, the Board of Education required that the candidate for admission to such colleges must as a rule have passed through a four-year course in a secondary school. At the same time, the university training departments began to demand an even higher standard of academic preparation. Thus the closing of secondary school opportunities to future elementary school teachers ceased,

and a step not taken by Germany until after the War was consummated. Teaching young children was no longer to be regarded as a trade to be undertaken by young apprentices whose own education had been confined to the elementary school. It was now a profession requiring a reasonable basis in general education (secondary school to 16), followed by professional study (training college to 18). By 1925, eighty-three per cent. of the entrants to training colleges had graduated from the secondary school.

Those who have been in the vanguard of the upward revision of standards would make eighteen the minimum age of admission to training colleges, and would discourage any actual teaching before this age. The future teacher should, in this view, be just a boy or girl among other boys and girls, uncommitted to any particular vocation until the intensive training of the professional school is begun.

Before 1926, the Board of Education Regulations rigidly prescribed the academic and professional courses for intending teachers. These Regulations are now largely defunct. Since 1926, the English policy of fostering variety and experimentation is nowhere more clearly seen than in the field of teacher-training. One official characterizes the present policy as one merely of requiring "suitable courses to be given to suitable students by suitable teachers under suitable conditions."

Secondary Teachers.—Since the War, a change of attitude has taken place with respect to the training of those who are to staff the great variety of secondary schools in England. The training departments of universities, supplemented by ten other secondary training colleges, have been the agencies utilized. The substance of the change is that since 1924 the Board of Education has permitted universities to transfer to a course in

secondary teaching any four-year student who takes his degree with honors at the end of his third year. This instruction is free (grant-supported). In return, the Board exacts a solemn declaration from the candidate that he intends to teach in an "approved" school; i. e., one which receives grants from the national treasury. The course offered is purely professional and includes concentration on the teaching of a single subject or group of allied subjects. If this major is a modern language, the candidate must also spend six months in residence and study abroad.

It should be noted that the heavily endowed secondary schools, which ask for no grants, are not covered at all in these arrangements. They continue as before to exercise *carte blanche* in the staffing of their classrooms, usually from among graduates of the old universities.

HIGHER EDUCATION

The growing participation of the universities in teacher-training and the struggle of the secondary schools against university domination have already been cited as post-War trends. In addition, financial stringency since the War has caused the universities to call on the national government for grants. When the old universities of Oxford and Cambridge sought such assistance in 1923, the question was much agitated as to how much external control would be exercised in return. Traditionally English universities have been considered self-governing autonomous bodies, and they will undoubtedly resist any dictatorial gestures on the part of officials administering the grants.

Other recent tendencies can be but briefly stated. When England, in common with other nations, faced the great post-War demand for university education, a fundamental question of procedure arose. The Uni-

versity Grants Committee in 1924 recommended that present institutions be strengthened rather than new ones established, and this recommendation is being followed. Women are demanding better provision for their sex, too, especially at Oxford and Cambridge. The issue here revolves around the question of whether it would be better to found more women's colleges at these universities or to found separate universities for women. Either solution at the present time is made difficult by economic obstacles, but it is significant that leading advocates of higher education for women are supporting the first, and are attempting to break down the idea that the old universities are masculine institutions.

REFERENCES

(CHAPTERS I, II, III)

- Kandel, I. L. (Editor)—*Educational Yearbooks, International Institute of Teachers College, Columbia University*, 1924 (Chapters on Education in France, Germany, and England, Chapters on Problem of Method in England and in Germany), 1925 (Chapters on Education in France, Germany, and England, Chapters on Elementary School Curriculum in England and in Germany), 1926 (Chapters on Education in France, Germany, and England; Chapters on Problems of Secondary Education in England and in Germany), 1927 (Chapters on Education in France, Germany, and England, Chapters on Teacher Training in France, Germany, and England).
- Kandel, I. L.—*French Elementary Schools* (1926.)
- Kandel, I. L.—*Reform of Secondary Education in France* (1924).
- Kandel, I. L. and Alexander, T.—*Reorganization of Education in Prussia* (1927).

CHAPTER IV

AMERICAN EDUCATION

ADMINISTRATION

Federal Governmental Activity.—In the transition period of American education (Revolutionary War to 1835) despite the absence of any reference to education in the Constitution, the new federal government entered into a policy of land subsidies for the support of common schools and universities which closed only with the admission of the last eligible territories to statehood in 1912. In the period of the Public School Revival, the Morrill Act established land-grant colleges in every state (1862). In 1867, the United States Bureau of Education was set up in the Department of the Interior. This Bureau (recently renamed the Office of Education) has at present one administrative duty, in addition to the publication of reports on a wide variety of educational matters. This is the supervision of the accounts on the land-grant colleges created by the Morrill Act. It did administer schools for the natives of Alaska from 1884 to 1931 when this function was transferred to the Indian Service.

During the period of expansion (1870 to the present) the federal government through the Smith-Hughes Act (1917) entered the field of vocational education of less than college grade. Beginning in 1917 and continuing to the present, a substantial annual appropriation is made to states meeting the conditions of the Act, for the

support of agricultural, trade, home economics, and industrial education, as well as for the preparation of teachers in these fields. This Act set up for its administration a special body, the Federal Board for Vocational Education, which later (1921) was also charged with administering the Civilian Vocational Rehabilitation Act for the re-education of those injured in industry.

At present, in addition to the United States Bureau of Education and the Federal Board for Vocational Education, many other federal agencies are concerned with educational matters. The allotment of these functions to departments has been by accretion, almost without plan or purpose. Thus, the Department of Agriculture administers agricultural extension education through which the school is brought to the farm, the dairy, and the orchard; the Children's Bureau of the Department of Labor administers maternity education; the Office of Indian Affairs of the Department of the Interior administers and supports Indian schools; the Insular Bureau of the Department of War administers the schools of Porto Rico and the Philippines.

There has been a repeated attempt, beginning in 1918 (Smith-Towner Bill) to establish an eleventh seat in the president's cabinet, a Secretary of Education. There are two ideas behind this movement; first, the idea that one body can more efficiently administer the various federal laws dealing with education than the present multiplicity of bodies, and second, the idea that the time is now ripe for the national government to encourage general (vs. vocational) education by liberal annual appropriations. In one form in which the bill appeared, it provided for the annual expenditure of one hundred millions of dollars for health education, the education of immigrants, teacher-training, the elimina-

tion of illiteracy, and the equalization of educational opportunity. The bill has met with stout opposition from those who see in it jeopardy to state control of education and another step toward the federalization of American life. Theoretically, in any form in which the bill has thus far appeared before Congress, there have been no mandatory requirements imposed on state boards, which in the American tradition are the executive educational bodies. The form has been disjunctive: *if* you wish to share in these disbursements, you *must* meet these requirements. Opponents of the bill fear that practically this will operate to federalize American education. In addition, the proposed new body is sometimes called the Department of Education and Relief (or Welfare), in which capacity it would entail a still more fundamental reorganization of federal agencies.

THE ERECTION OF COMPLETE STATE SYSTEMS OF EDUCATION

State School Officers.—Every state has succeeded during the last seventy-five years in setting up a state school officer. The method of attaining office shows an interesting variety: he is now elected by the people in 34 states, appointed by the governor in 6 states, and appointed by the state board administering education in 8 states. It is probable that the future trend will be in the direction of removing from the ballot and vesting in the governor or state board the power to decide the incumbent for this highly technical and expert office. The chief state officer is on the whole poorly paid. While his average salary is \$4000-\$5000, the range of compensation is from \$1800 to \$12,000.

The Cost of Public Education.—The struggle during the Transition and Revival periods to establish the principle that the property of the state should educate

the children of the state has culminated in the general willingness of state legislatures to make liberal appropriations for the education of their children.

The increase in the cost of education for the nation as a whole mounted from 521 million dollars in 1913 to $1\frac{1}{4}$ billion dollars in 1923. Much remains to be done, however, to effect genuine equalization of educational opportunity. It matters where a child is born what kind of a public education he gets. For example, the average amount expended by states for each child of school age in 1922 was \$55.22. But, if he went to school in California, the amount expended on his education was \$127.26; if in Georgia, \$14.08. The trend toward equalization must face the problem of the disparity of wealth throughout the nation. One or two western states spend 4% of their income for schools and yet fail to reach the per capita school expenditures of states like New York and Pennsylvania which spend but $1\frac{1}{2}$ % of their income for this purpose.

The Status of Private Schools.—In the upbuilding of the vast structure of public education, the issue has sporadically arisen as to whether private schools shall be permitted to exist alongside of the public schools. Before the middle of the nineteenth century (e. g., New York, 1842) the withdrawal of public funds from these schools was accepted as an American tradition. However, the question of the right of such schools to exist, especially those on the elementary compulsory education level, had not been raised. It has been raised three times within the last decade: first in Michigan (1920) where a proposition to make attendance at public schools compulsory was defeated by the electorate; second in Oregon (1922) where a similar proposition (an amendment to the state constitution) was accepted, to become operative in 1926. Private school interests fought the

matter to the United States Supreme Court, where the amendment was declared unconstitutional. The third instance was in the state of Washington (1924) where again the voters defeated the proposed limitation on private school initiative.

The trend in recent years has been such that the private schools have failed to keep pace with increased provision for public elementary and secondary education. Only about 6% of elementary school children and 10% of secondary school children are enrolled in private schools, the majority of these children being in schools under Roman Catholic auspices. Higher education, of course, is still predominantly private; over three-fifths of the students are in privately supported colleges and universities.

The Downward Extension of the Elementary Schools.—In addition to the setting up of a state machinery, the generous financing of schools, and the settling of the relationship between public and private schools, there is a trend to-day toward the reorganization of the traditional public school system. The first phase of this is to be seen at the bottom of the educational ladder.

The public kindergarten first appeared in America in 1873 (St. Louis; W. T. Harris and Susan Blow). The spread of the kindergarten movement in the last fifty years has been notable. Only about 6% of the children in kindergartens are in private institutions, and the absolute number in such institutions has been decreasing. Thus the trend here is in the direction of both absolute and relative decrease of private provision.

Only the merest beginning has been made in submitting the kindergarten to the pragmatic test. There is some evidence, however, that children who have attended it make more progress through the elementary school than those who have not.

Unlike England and France, the United States has no tradition of public education of children under five. It has never developed the equivalent of the English infant school or of the French école maternelle. Within the last decade, however, the need for the systematic training of the pre-school child has been receiving attention. The proposal is to found schools for children from two or three to five or six years of age, with the two-fold purpose of creating a proper environment for the stimulation and conditioning of such children and of demonstrating to parents the value and methods of proper physical, mental, and moral care of children. Thus far, the movement has been confined almost entirely to private schools and child welfare agencies. Outstanding examples of this downward extension are the demonstration nursery school of the Institute of Child Welfare Research at Teachers College, Columbia University, the school and clinic for the pre-school child at the University of Iowa, and the City and Country Schools of New York City, the last functioning since 1920.

The Downward Extension of Secondary Education.—A number of factors have focused attention on the need for a reorganization of the school years immediately following the sixth. The result in practice has been the growth of the junior high school, or intermediate school. This institution was foreshadowed by the Report of the Committee of Ten (1893; Charles W. Eliot), but it first appeared in practice about 1910. In its first phase, the movement was supported by the desire for a longer period of college preparation,—for a longer secondary education, as in European countries. In its second phase, however, the stress has been on a different kind of secondary education, rather than more of the old kind (e.g., in the influential reports of the Commission on

the Reorganization of Secondary Education of the N.E.A.). This shift has been due to the wide dissemination of secondary education, forcing upon it objectives other than college preparation.

As now developing, the junior high school aims: (1) better to articulate elementary and secondary education, to effect a transition from the relative maternalism of the first to the individualism of the second; (2) to make earlier provision for individual differences; (3) to furnish educational guidance; (4) to recognize the factor of elimination by caring for the retarded child and for the child who will drop out of school at 14, 15, or 16; and (5) to broaden and enrich the school experience of these years.

It is coming to be organized as part of a 6-3-3 or 6-2-4 or 6-6 plan, with the first predominating. It is to be conceived as a phase of general or liberal education. "It is neither a sub-secondary school nor a vocational school." (*Fifth Yearbook, Department of Superintendence, N.E.A., 1927*)

On the side of content, its most distinctive feature is the incorporation of extensive courses to supersede the intensive courses of the old regime: general science, general mathematics, manual arts (vs. work in joinery alone), introduction to a large amount of English literature (vs. detailed study of a few masterpieces).

The Upward Extension of Secondary Education.—The first state law dealing with the junior college was passed in California in 1907, and its real development has taken place since 1910. In 1927, such institutions existed in 37 states. They attempt to give the first two years of liberal arts work, less attempt being made than in the case of the junior high school to reorganize the work. The increasing tendency is for them to align themselves with secondary rather than higher educa-

tion; for example, the Association of Junior Colleges is affiliated with the Department of Secondary Education of the National Education Association. This has been in large part due to the enrollment in junior colleges of many for purposes other than preparation for the university.

The purely practical and less considered causes for the growth of junior colleges have been (1) the desire to relieve congestion in the beginning classes of universities, and (2) the demand for facilities for higher education nearer home. However, the more thoughtful proponents of the movement stress the fact that such institutions are needed (1) so that the small college can do thoroughly the first two years of work rather than diffuse its energies over a whole college course, and (2) to provide terminal general education for those who cannot, or should not, go on.

HIGHER EDUCATION

The period since the World War has failed to alter the striking fact that while elementary and secondary education in America are essentially public enterprises, higher education is still private. Three-fifths of college and university students are in private, largely denominational, institutions.

This raises the question as to whether higher education is intellectually free. While recent years have shown attempts of some religious denominations to taboo certain types of scientific teaching (especially the evolutionary hypothesis) in their universities, some of the state institutions too have felt pressure from legislatures in the fields of history and science.

A significant recent tendency has been in the direction of consolidation and cooperation between state and private universities, as well as among private institutions.

This has been due in part to the great increase in student numbers with its consequent financial problems. Consolidation and cooperation cut per capita costs. But it has been motivated also by new conceptions of scholarly comity, and the desire to further university objectives by division of labor. An example of this trend is the merger of the Catholic colleges in and around St. Louis with the College of Arts and Sciences of St. Louis University. The autonomy of the affiliated institutions remains, but degrees are granted by the University.

An important internal trend in higher education is the extension to students of proved capacity of a greater amount of self-direction in their work (so-called *honors courses*). This usually takes the form of exemption from class attendance in conjunction with faculty supervision of individual study. It is an interesting application on the college level of the recognition of individual differences in capacity. In 1924, over ninety colleges had such courses. Twelve of these released honors students in the last two years from classes, and allowed them to pursue intensively a chosen field of study.

TRAINING OF TEACHERS

As has already been stated, the fight for training schools for teachers sponsored by such leaders as Carter and Mann gave America its first public normal schools about 1840. The improvement and expansion of this phase of our education proceeded rapidly from about 1870 to the World War.

In 1910, in spite of much progress, less than half the elementary teachers had completed a four-year high school course before entering upon their work. Between that date and the World War the standards were considerably raised, especially in the cities where high

school graduation and a two-year normal school preparation were set up as minimum requirements. The World War was a setback to this movement, and in its wake many undertrained teachers came into the schools. The tide turned again about 1923, and by 1927 the supply of teachers had reached a point where certificating bodies could (1) insist upon high pre-service training requirements, and (2) by reflection make possible several improvements in the scheme of teacher-training.

At present, the old high school training classes survive, being still the chief agency for the training of rural teachers. The other agencies which together make up the structure of teacher-training institutions are: (1) the county normal schools, in point of numbers the least significant of all; (2) the state normal schools, of which there is at least one in every state; (3) the state and city teachers colleges; (4) the Land Grant colleges of the Morrill Act, which are the chief supply of vocational teachers; and (5) the state and endowed liberal arts colleges. The last of these are the chief source for the training of secondary school teachers.

The chief trend in post-war years in the curriculum of teacher-training institutions has been two-fold: (1) curriculum differentiation, and (2) provision of better facilities for observation and student-teaching. Both were greatly accelerated by the report of the Carnegie Foundation on *Curricula Designed for the Professional Preparation of Teachers* (1917). The first, curriculum differentiation, rests on the assumption that there is a sufficient difference in the knowledges and techniques required at different levels of teaching to take cognizance of these levels in teacher-training. It would distinguish more sharply than has been customary between the primary and intermediate grade teacher, and between the junior and senior high school teacher. The

second tendency is in response to the thesis that detached methods and theory courses remain non-functional unless tied to child contacts. It is interesting to compare the evolution of teacher-training programs in England and the United States with respect to this thesis (See page 33).

Currently, the greatest uncertainty centers about the use to be made of the extra year or two available for teacher-training. The old two-year normal school, since supply of teachers has outdistanced demand, is giving way to a three-year school, and in California and a few cities to a four-year school. The question is, *Shall the added year or two be utilized for cultural enrichment of the teacher's preparation, or shall they be given over to professionalized courses?* Bagley points out that the teacher differs from the lawyer and physician in that what is *general* or liberal for them is the teacher's chief stock in trade. If this view prevails, the dualism between liberal and professional courses will break down, and a strong sanction will exist for the *enrichment* of the extended course. At present, the desire of many teacher-training institutions to grant degrees and to receive accrediting from sectional bodies which are essentially liberal arts-minded are the determining forces at work. They, more than thought-out philosophies of teacher-training, account for the increased number of general courses, sometimes poorly integrated with the traditional professional curriculum.

COMPULSORY ATTENDANCE

The Extent of Compulsory Attendance.—During the Public School Revival, the right of the state to compel a parent to send his child to school was vigorously combatted in many sections. As late as 1895, nineteen states had no compulsory attendance laws. It was dur-

ing the World War that the last state, Mississippi, passed such legislation.

The great difficulty in enforcing such laws is evidenced by the fact that the Census of 1920 showed 1,060,000 children between ten and fifteen at work instead of in school.

There is wide disparity among the states in the minimum of education guaranteed by them to their children. Thus, two states require a total attendance of 90 months ($7\frac{1}{2}$ years), while six states require a total of 40 months (3 1-3 years).

Federal Action.—Two attempts have been made by Congress to nationalize child-labor legislation, always the complement of compulsory attendance, for the child must be freed from gainful occupation if he is to attend school. The first was in 1917, and made it a misdemeanor for employers to ship into interstate commerce the mined products of children under 16 and the manufactured products of children under 14. The second was in 1919 and was an economic approach to the problem. A tax of ten percent. was to be levied on the interstate products of all mines and manufacturing establishments employing children. Both were declared unconstitutional. It is significant that the two houses of Congress approved a constitutional amendment in 1924, thus attempting a flank attack on the problem. Dr. W. Carson Ryan says of the proposed amendment that it gives sanction "to the widely accepted conviction that the years below eighteen are primarily for education rather than for unsupervised industrial employment."

State Action.—The state legislative phase of this movement to extend educational control into the adolescent years has taken the form of compulsory part-time schooling. Twenty-one states provide for such school-

ing, usually for four hours weekly to the age of eighteen, where it is administratively possible. For example, in New York State, in districts with 200 minors between 14 and 18 not attending a full-time day school, part-time attendance at a continuation school is mandatory.

This movement began in 1911 in Wisconsin, and has had its greatest impetus since 1919. The two concurring causative factors have been the revelations concerning illiteracy and *foreignism* bared by the War, and the aid offered the states for the maintenance of such schools by the Smith-Hughes Act. The growth of continuation schools has created a host of new curriculum and teacher-training problems, and it has put a heavy strain on attendance-enforcement machinery.

Continuation schooling may be regarded as part of a program of secondary education for all. British labor has opposed it precisely on the ground that it offers a half-loaf, and that nothing short of full-time secondary education for all will satisfy the needs of modern living.

METHOD AND CURRICULUM

The Project Movement.—Perhaps the most significant stir in the field of methodology since the War has been associated with the so-called project method.

First Meaning.—From one point of view, the conception of teaching and learning connoted by this term does not constitute a method at all. Kilpatrick and his followers stress "wholeheartedly purposeful activity in a social context" as the differentia of project teaching. Under this meaning, there is no inherent antagonism between project teaching and the use of special method techniques. The latter may well find a place within purposeful activity. This first conception of the project movement is embodied in Kilpatrick's well-known

pamphlet *The Project Method* and in his *Foundations of Method*. It became crystallized in the discussions of The National Conference on Educational Method organized in 1917, and in the *Journal of Educational Method*, which first appeared in 1921. The editor of the *Journal* characterizes the project not as a method, but as "a synthesis of current educational ideas and a focus for the original contributions of Dewey, Thorndike, Kilpatrick, and others to the problem of cooperative learning, thinking, and living." He calls it "rather the basis for a technique than technique itself."

Bode, who has written one of the keenest evaluations of this movement to date, points out that the project as interpreted by Kilpatrick and his school is essentially an insistence on a desirable *attitude* in learning, substantially covered by the term interest. Bagley is conspicuous for his attack on the axiom that all learning must take its cue from purpose. He contends that consciousness of purpose is of late development biologically, and that the child must depend on adult control and guidance until we can safely substitute his purposes for the adult's.

Second Meaning.—However, there are at least two other meanings which have become attached to the term project. One of these has the merit of stemming from the original use of the term in education. It is illustrated in Charters' definition of the project as "a problematic act carried to completion in its natural setting." This was its first meaning, used in connection with the introduction of agriculture into the high schools. To secure laboratory facilities, home projects were set up, in which the student planned and executed, step by step, the work necessary to grow an acre of corn or to raise poultry. The key ideas were (1) vitalization of the reading, science, arithmetic, etc. by making them focus

on the execution of a well-defined job, and (2) incidental as opposed to systematic or logical learning of school material.

The critique of the project concept under this meaning has been pointedly worked out by such writers as Bode and Bagley. Bode grants it a limited usefulness in school learning, i.e., in activities where a natural setting akin to that in agriculture can be set up. If applied as a general method, the learnings will remain haphazard, discontinuous, and without perspective. Insight into mathematical relationships cannot be developed by incidental treatment, nor can the continuity of history be felt where history is learned as an instrument for staging a play. Further, *natural settings* for literature, history, and many other school experiences simply do not exist, as they do in agriculture. Bagley emphasizes the fact that information gained incidental to problem solving is not so easily retained or recalled as that mastered for the sake of its own mastery. He holds too that the chances for transfer of learnings are diminished unless procedures and principles are lifted out of the matrix of application to immediate problems and purposes.

Third Meaning.—The other interpretation of project teaching emphasizes neither purposiveness, nor instrumental learning, nor the natural setting. It stresses rather the *organization* of what is learned. It is associated with the name of Charles A. McMurry, and is expounded in his *How to Organize the Curriculum* and in his *Teaching by Projects*. The key idea is to reorganize the curriculum, displacing the piecemeal treatment of topics by central cores called *central teaching units*. The problem then becomes one of discovering the best units and building the curriculum therefrom. On the showing of those who interpret project teaching in this

sense, some of the units (projects) appear to be highly vicarious for present-day learners (e.g., the Louisiana Purchase, Virginia Plantation Life, Steel Production at Pittsburgh, etc.).

Both Kilpatrick and Bode specifically reject this interpretation of project teaching. The first sees in it an unwarranted extension of the term and insufficient stress on purposiveness. The second, who would limit the term project to incidental learning to avoid confusion, sees in the central teaching units so much material to be learned directly, i. e., with the aim to know something about selected topics.

Practical Effects.—With the concept of project thus given at least three major interpretations by its leading advocates, attempts to organize teaching on a project basis have led to varied results.

The first attempt to work out a teaching program on a project basis is to be found in M. E. Branom's *The Project Method in Education* (1919), and numerous others have attempted the same task (see Herring, J. P. —*Bibliography of the Project Method, Teachers College Record*, March 1920). There is also a growing number of special-subject textbooks ostensibly based on a project attack. Typical of these are S. A. Leonard's *Teaching English Composition in the Grades*, Guitteau's *Preparing for Citizenship*, and Van Buskirk and Smith's *The Science of Everyday Life*.

THE TREND AGAINST CLASS ORGANIZATION

The problem of grading children, of grouping them on the basis of ability, has had a long evolution, from the simultaneous method of the Christian Brothers to the better quantified groupings made possible by intelligence and achievement measurement. Much of this

work has assumed the necessity, and the value, of classroom organization. From Froebel to Dewey, social participation, a joint sharing in learnings, has been philosophically defended. But at the same time great prominence has been given to the necessity of detecting and providing for individual differences in interests, aptitudes, and learning capacity. Gradually the inevitable question has arisen, *How can a proper balance be struck between social participation and due recognition of individual differences?* In recent years, two programs going far in the direction of breaking down classroom organization, have attracted wide attention.

The Dalton Plan.—The first of these is the so-called Dalton Laboratory Plan. It was introduced into the high school in Dalton, Massachusetts, by Helen Parkhurst, and later into the Children's University School, New York City. It has been fully described by its originator in her book *Education on the Dalton Plan* (1922).

The first feature of the plan is the substitution for instruction by the teacher of individual responsibility for learning by the pupil. This is accomplished by the device of dividing the work of a year into as many parts as there are school months (9). Then each monthly assignment is subdivided into 20 parts, corresponding with the school days. The child contracts at the beginning of the year to complete a monthly assignment in all subjects within the allotted month. The child works out the jobs on his monthly assignment, *in any order*, capitalizing his interests. The *discipline* of stated periods for stated activities is conspicuously absent in this plan. The plan substitutes for classroom recitations under teacher direction, a system of laboratories, where the learner reports for special help, and where the related materials are to be found.

The second feature is the opportunity given children to proceed at their own rate of learning. This, however, is tempered by the requirement that they complete a whole month's assignments in all subjects before proceeding to a second month's assignments in any.

The third feature somewhat modifies the extreme individualization of the plan. It provides a small part of the time daily for group conferences, each child meeting with the year in which he is working.

The most vulnerable points in this plan have been pointed out by its critics. The careful prearrangement of learning experiences (in printed work-sheets) minimizes the learner's participation in planning. There is an almost total absence of group experiences, so vital in building appreciations and ideals. There is a surprisingly small part played by the mature mind of the teacher in the direction of learning.

Nevertheless, great enthusiasm has been aroused for it in England, chiefly in the secondary field, and many American schools have appropriated the name and some of the procedures into their work.

Winnetka Plan.—A second protest against the class lock-step is the Winnetka Plan. This is associated with the city of that name in Illinois, and with its Superintendent of Schools, Carleton W. Washburne.

Its first feature is a careful reevaluation of the traditional curriculum, with an analysis of each subject to discover the learning steps involved. For example, Washburne has condemned beginning reading material from children's classics, and incorporates instead into his reading curriculum connected stories dealing with the daily activities of small children.

The second feature is constant self-testing by the learner of his individual progress. The techniques

	Dalton	Winnetka
1. Social Participation	Small part of the time each day for group conferences.	Afternoon program made up entirely of socialized activities.
2. Attitude Toward Traditional Curriculum	Practically accepted; no new analysis.	Thoroughgoing reorganization. Analysis to discover steps. These incorporated in learning activities and in new textbooks with accompanying teaching apparatus.
3. Measurement of Progress in Learning	Not conspicuous for self-testing devices.	Conspicuous stress on self-testing and comparison with past achievement.
4. Total Learning Time	Assumes a year (approximately) for a year's work for all.	Great flexibility of time for mastery of fundamental knowledges and skills.
5. Attitude Toward Class Organization	No graded classroom organization.	Graded classroom retained in form. Functions as a class group in after-noon programs.
6. Level of Experimentation	Chiefly secondary; not at any rate, below the fourth year in the elementary school.	Chiefly elementary.

worked out here are ingenious, and highly suggestive for all good teaching.

The Winnetka schools have no class recitations in the basic skill subjects, which make up the morning program. However, the afternoon program consists of socialized activities, such as the dramatization of history and geography materials, and discussions on civic problems. For both programs the classroom grouping is retained.

3. Comparison of the Dalton and Winnetka Plans.—On page 56, for convenience, is presented a tabular comparison of the two plans.

The Gary (Platoon, Work-Study-Play) Plan.—The reorganization which goes by any one of these names is associated with the attempt of Superintendent William Wirt of Gary, Indiana, to enrich the school experiences of children, while at the same time solving certain pressing problems of school administration and finance. A searching survey of the schools of Gary was conducted in 1915-1916. The plan came into widest public notice, perhaps, in 1917, when a bitter mayoralty election was fought around it in New York City, the outcome leading that city to abandon its experiment to *Garyize the schools*. But some of the Gary principles and mechanisms have greatly influenced other cities, so that its salient features should be understood.

The one which has attracted most attention and had most imitators is the mechanical aspect of the plan, that of having two schools in one building. The children are divided into two groups (platoons). One group is engaged in the study of the common branches in *home rooms*, while the other is engaged in special activities in *special rooms*. At the end of a period, the groups alternate. This offers an opportunity to keep the whole

school plant, including gymnasium, auditorium, library, etc. in use throughout the day. Herein lies the appeal which the plan made to educational administrators in crowded cities, seeking some means of reducing the *part-time evil*.

Yet this is not the significant contribution of the plan. Its contribution lies in the attempt at genuine enrichment of school experience. Work, study, and play are to be included under school education. This reflects the emphasis of Dewey and others on occupational interests, as well as the growing recognition of the importance of the recreational phase of education. The platoon arrangement may be considered a means to curriculum enrichment, a means of accomplishing it without too great increase in per capita cost. As a consequence of the enriched course, the school day is lengthened. More of the child's time is placed under the specific educational agency, less left to by-educative agencies.

Other elements embodied in the Gary schools, but not essential to the basic idea were: greater departmentalization of work, unification of elementary and high schools (both in the same building), a longer school year, and cooperation with religious leaders to the end that the religious factor might be provided, when desired by the parents, by denominational teachers within the lengthened school day.

The Gary movement has had to face great misunderstanding. Obvious pressure-groups have attacked the longer school day and some of the added features, notably religious instruction and greater departmentalization. Perhaps the greatest obstacle to an unbiased judgment of the proposal has been the confusion of rich diversified practical arts (the *work* of the Gary plan) with vocational education. Organized labor groups have gotten into this confusion, and it was very conspic-

uous in the political campaign that drove the Gary schools out of New York City.

THE MEASUREMENT MOVEMENT

Origins.—The application of measurement to education has descended from two main lines of work: (1) from the statistical studies of human nature by Galton and Pearson in Europe, and by Cattell and Thorndike in America. The publication by Thorndike of *Mental and Social Measurements* (1904) was a landmark in the movement. (2) From the attempt of Galton to measure the capacities of man and the quite independent attempt of Binet to discover which children in French schools were defective (1904).

Binet constructed his *Measuring Scale of Intelligence* in 1908, and it was revised in 1911. This Scale underwent further revisions in America by Goddard (1908), Kuhlman (1909-1912), and by Terman and Childs (1912) in the well-known Stanford Revision. A different type of revision, the Point Scale, was developed by Yerkes, Bridges, and Hardwick (1915). These are all individual tests; i.e., tests administered to one examinee at a time. The exigencies of the World War developed the group test, Army Alpha being the parent of many such tests since 1918 for literates, and Army Beta for illiterates.

All these measuring instruments were circumscribed in the sense that they purported to probe and measure *intelligence*, variously defined, but always concerned with intellectual types of response. Recently, attempts have been made to measure aspects of personality predominantly of the affective and volitional type. Significant examples of these attempts are the Downey Will-Temperament Test, the Voelker test of trust-

worthiness, the Liao test of moral judgment, and the Allport test for Ascendancy-Submission.

Uses.—These instruments have had their chief educational use in connection with the classification of children and the study of atypical learners. It may be stated that responsible leaders of the movement regard their contribution as auxiliary, to be considered at all times along with achievement in school subjects and the judgment of the child's teachers. Beginning in 1916, they have been increasingly used, too, in connection with college entrance examinations.

The Chief Controversy.—The chief controversy concerning the theoretical grounds on which inferences from intelligence tests rest is probably the question of the constancy of the intelligence quotient (I. Q.). The whole matter of the contributions of nature and nurture is involved here, as well as the democratic concept of education.

Bagley and Bode have led the fight against the extreme *hereditarians* in the intelligence testing movement. They grant the enormous range of ability revealed by the tests, but they reject the undemocratic inference of restricted opportunity for the less favored. The findings "speak with compelling force, not for educational restriction, but for educational expansion."—Bagley.

Among important recent conclusions pertinent to this controversy are those of the University of Chicago and Stanford University studies. In brief these are: (1) the effect of environment on the intelligence of foster- (adopted) children is considerable. Children in the better foster homes gained considerably more than those in the poorer ones. Those adopted at an early age

gained more than those adopted at a later age. (2) The maximal contribution of the best home environment is about 20 I. Q. points. The poorest home environment may depress the I. Q. as much as 20 I. Q. points.

Achievement Measurement.—In addition to intelligence, volitional, and emotional measuring instruments great activity has manifested itself in recent years in the quantitative determination of children's success in schoolwork. The real beginning of the scientific measurement of educational products may be placed about 1908, when Stone published his arithmetic tests, followed two years later by Thorndike's handwriting scale. Since then, tests or scales have been devised for most of the elementary and for many of the high school subjects.

There have been three phases in the use of these instruments for school purposes. They were used first for *survey* purposes; that is, they were applied to a large number of learners, perhaps a whole school system, and the average accomplishment was compared with the test norms or with the averages for other large groups. Later the emphasis shifted to their use for *diagnostic* purposes; that is, to reveal weaknesses and fortes as a basis for remedial teaching. With this new use has gone a more careful analysis of school subjects, and a criticism of the tests from the standpoint of validity, i.e., usefulness in measuring specific desirable constituents in each subject. The third phase in the development of achievement tests, which has overlapped the second, is their use as teaching devices. Here, the process of doing the lessons is the process of taking the tests. Such instruments are called *practice* tests, and they are really a refined development of a very old idea, long associated with the teaching of spelling.

CONTEMPORARY EDUCATIONAL LEADERS

In tracing recent trends in the theory and practice of American education, it has frequently been necessary to refer to educational leaders associated with them. For better crystallization, the salient contributions of some of these leaders are here gathered together.

John Dewey.—Through his work at the experimental school at the University of Chicago (1896-1903), as Professor of Philosophy at Columbia University, and through his extensive educational publications, Dewey has exerted a profound influence on educational thought and practice in this country.

In his *Interest as Related to Will*, later rewritten as *Interest and Effort In Education*, he rejected the assumed opposition of interest and effort in education as a philosophical dualism. Constructively, he argued that the greater the learner's interest in the end to be gained, the greater the effort put forth for its attainment. The great present-day insistence on motivation and meaningful school experience are in the line of descent from this position.

In his *School and Society* and his *Child and the Curriculum* he formulated the primary aim of the school as training children in cooperative and mutually helpful living. Dewey's corollary is that the school must reproduce the actual conditions of working, thinking, and feeling that exist in democratic life, and must give children practice in them. Throughout his philosophy of education, these theses recur, and his influence has been a factor in all plans for the socialization of method and discipline. From these ideas too has come the attack of Dewey's followers on the *vestibule* conception of the school's function, and its replacement by the principle that the school is life, not a preparation for it.

In his *How We Think*, he made his well-known analysis of a complete act of reflective thinking into five steps: (1) a felt difficulty, (2) its location and definition, (3) suggestion of a possible solution, (4) development by reasoning of the bearing of the suggestion, and (5) further observation and experiment leading to its acceptance or rejection. The practical effect of this phase of Dewey's contribution has been to make focal in theory and increasingly in practice the value of a problem situation in thoughtful learning. Those who conceive the project essentially in terms of purposeful learning, like Kilpatrick, may be considered as perpetuating and developing this part of Dewey's theory. It is in this book, too, that Dewey makes his criticism of the Herbartian steps in teaching, of their assumption of passivity in learning, and of their lack of conformity to a genuinely reflective thought process.

In his *Democracy and Education*, he hunts down and exposes those elements in our educational thought and practice which violate his conception of a democratic society; viz., a society in which the individual member of a particular group shares intelligently in all its activities and interests, and in which each group has intimate contacts with other groups. The implications of this view of democracy are far-reaching, and Dewey has tracked them down into school administration, method, discipline, and curriculum selection and organization.

Edward L. Thorndike.—Thorndike is associated particularly with the development of the science of educational psychology, and with intelligence and achievement measurement.

In his *Theory of Mental and Social Measurements* and in his pioneer course in the application of statistical method to education at Columbia University, he defi-

nately helped establish educational statistics as worthy of advanced study.

In his *Educational Psychology*, he dealt with three basic aspects of human nature. The first volume, *Original Nature of Man*, marked a decisive step away from the earlier blanket classification of unlearned tendencies (imitation, curiosity, pugnacity, etc.), and substituted a bold attempt at their analysis into specific situations and responses, all on a frankly biological basis. The second volume, *Psychology of Learning*, formulated three laws of learning—the laws of exercise, effect, and readiness—and attempted to explain all learning in terms of these laws. Transfer of training he explained by his theory of identical elements; i.e., that improvement in one mental function (memory for poetry, discrimination of line-lengths, etc.) affects other mental functions only insofar as the two contain identical elements. The third volume, *Individual Differences*, dealt with the extent and causes of differences of ability in measurable traits, and has been influential in affecting practice in recognition of these differences.

In the field of measurement, Thorndike's handwriting scale of 1910 was the first instrument for objective quality measurement, and he has since published scales and tests, sometimes alone and sometimes in collaboration, in other school subjects, notably in reading and vocabulary measurement. He has been conspicuous, too, in the development of group intelligence tests and in their application to the selection of candidates for college entrance.

His *Educational Psychology* had pointed toward the application of the laws of learning to the actual teaching process. This phase of his contribution has been furthered by the analysis of these laws in specific school

subjects, (arithmetic, algebra), and in the construction of textbooks for use by children in arithmetic.

More recently Thorndike has investigated the phenomena of the learning process in adults, and published his findings in *Adult Learning*. Among the major conclusions of this investigation, so disturbing to the older a priori belief in rapidly decreasing plasticity with increasing age are the following: (1) learning capacity increases to a zenith around twenty years of age; (2) this maximum capacity continues to about twenty-five, and then declines very slowly; (3) from twenty to thirty ability to learn is at a higher average than during any other life decade; (4) from forty to fifty it is as high as at age fourteen to fifteen.

Lewis M. Terman.—Terman was one of the pioneers in the revision and improvement of the Binet-Simon tests for intelligence. In *The Measurement of Intelligence* and in *The Intelligence of School Children*, he summarizes and applies the technique used in the Stanford Revision. Like Thorndike, he has contributed to the two other fields of measurement, group intelligence tests and achievement tests. The Stanford Achievement Test, a battery of carefully constructed tests in reading, arithmetic, nature study and science, history and literature, language usage and dictation, has been extensively used in the schools.

Terman has also been identified with the development of standards of school hygiene. His *Hygiene of the School Child*, recently revised, and his *Health Work in the Schools*, written in collaboration with Hoag, are significant attempts to apply the findings of the science of health to the manifold problems of education.

More recently Terman and his associates have been engaged in the study of gifted children, children with intelligence quotients of 140 and above. Their findings

have appeared in *Genetic Studies of Genius*. One of the conclusions of these studies is that as a group the gifted children excel the average of other groups in such physical traits as height and weight. Another conclusion is that these children are related to eminent men and women much more often than the laws of chance would yield.

William C. Bagley.—Both as a university professor and writer, Bagley has exerted a steadying critical influence on American educational thought by questioning the validity of many of the current movements.

Especially important is his attack on educational *determinism*, the doctrine that intelligence is so much a function of original nature that educational opportunities must be restricted for the lower levels as revealed by the tests. He has insisted that the inference from the test findings is a non sequitur, and that the findings themselves are open to question. As far as the army test scores are concerned, Bagley believes that there is a high correlation between the results of the tests and educational opportunity.

He has warned against *opportunism* in education, the substitution of immature child purposes for adult purposes as a clue to curriculum and method. His critique of the project movement is one aspect of this position.

In his theory concerning interest and effort in education, Bagley would put a premium on effort—the work ideal—without apology, and set it up as a motivating force, relegating other and more immediate incentives to a minor place in teaching.

In addition to these critical attitudes, Bagley has been a fruitful writer on some very practical phases of teaching, such as classroom management, teaching techniques, and teacher training.

William James.—While not a contemporary leader in American education, James may well be included in this summary because of his contributions to both psychology and education. In the last decade of the nineteenth century (*Principles of Psychology*, 1890; *Talks to Teachers*, 1899) he turned his face against the prevailing Herbartian psychology, and indicated some of the main highways along which both psychology and education have since traveled.

In the first place, he conceived intelligence as a tool for adaptation and not as a fixed entity. This gave a dynamic vector to educational philosophy and obtruded the idea that the learning organism is always reacting.

In the second place, he emphasized habit formation as the chief means of education. "Education is for behavior and habits are the stuff of which behavior consists." His statement of the conditions necessary for the initiation and fixing of desirable habits and for the weakening of undesirable ones has been often quoted, and contained in germ the ideas given explicit formulation later by Thorndike and other psychologists.

In the third place, he substituted experimental techniques for a priori discussions of such psychological problems as memorizing, forgetting, transfer of training, etc. His procedures were often faulty and the conditions insufficiently controlled (e.g., in his investigation of the transfer of memory training), but the experimental approach has never since been abandoned.

In the fourth place, he formulated a new and challenging theory of emotional responses. He rejected the view that such responses are essentially intellectual, and stressed the fact that they are visceral and physiological in nature. The so-called James-Lange theory of the emotions held that the glandular, muscular, and other physiological ingredients in fear, anger, and other af-

fective experiences *are* the emotion, not merely parallel phenomena.

Finally, he called attention to the significance of the instincts, and to their biological adaptiveness. He was among the first to recognize their importance in education, though his theory of their transitoriness with its educational implications has since been outgrown.

G. Stanley Hall.—Hall was the leader of the child study movement of the early twentieth century. He and his students at Clark University brought into prominence the careful observation and recording of the reactions of children at various levels of development to a host of situations. In this way, though in his own work the dubious questionnaire was too often the method used, he gathered illuminating data for genetic psychology. His main influence has been exerted in four fields.

The first is in the investigation of original tendencies. This is a perennial problem of psychology, and Hall's contribution does not lie in any definite solution, but rather in his insistence with James and other pioneers, that sound education must be based on what original nature supplies.

The second is his use of the doctrine of recapitulation (parallelism between ontogenetic and phylogenetic development) to interpret the genesis and growth of reactive tendencies. This phase of his work has now been quite superseded by objective investigation, but for two decades it profoundly colored curricular theory. It was the American transplantation of the Herbartian culture epochs theory. The idea of recapitulation, too, gave rise to influential doctrines concerning the utilization of original nature for educational purposes, notably to the doctrine of catharsis; i.e., getting rid of an unde-

sirable tendency by giving it early opportunity to expand itself.

The third is his recognition of the greatly limited interpretational powers of young children. In his *Contents of Children's Minds on Entering School*, Hall proved the necessity for building up an experiential basis for accurate concepts.

Finally, he was among the first to investigate and interpret the phenomena of adolescence. Hall's *Adolescence* (1904) must be accorded an important place in the movement for the reorganization of secondary education, in spite of its heavy dependence on questionable biological premises, and the since disproved *saltatory* conception of development.

Boyd H. Bode.—Bode, as university professor and writer, has within the last decade exerted an influence somewhat akin to that of Bagley. In *Fundamentals of Education* (1922), in *Modern Educational Theories* (1927), and more recently in *Conflicting Psychologies of Learning* (1929), he has subjected current trends and theories to searching evaluation, especially at points where the scientific label has been adduced to cover insufficiently analyzed procedures. With keen wit and a Chestertonian turn of phrase he has put upon the defensive some of the proponents of the newer educational movements.

He takes issue with the growing tendency to select curriculum experiences by *activity analysis*; i.e., by analyzing the habits, appreciations, knowledges, etc. of present-day efficient adults. This ignores the ideal of a progressively changing social order. Further, activity analysis can never determine the objectives of education. On the contrary, our objectives must determine what sort of facts are needed, and consequently how the method of activity analysis is to be used. It is not

difficult to see in this position the thesis that the determination of the purpose of education is the business of educational philosophy, not of sociology.

Following Dewey, he attacks the trend in educational practice—which has some supporters in theory, notably Snedden—to divorce vocational from general education, to distinguish between education for production and education for consumption. Bode rejects this dualism, and would make “vocation the center for a broad social outlook.” This is necessary in his view because democracy is “an integration of vocation and culture.”

Bode's position with respect to the project has already been treated. In the form of central teaching units (McMurry), and of whole-hearted purposeful activity (Kilpatrick), he sees in it no method at all. In the form of incidental learning, he grants it but a limited validity outside the field of agriculture, where it originated, and closely allied fields. Bode believes, however, that the agitation for the project has served a useful purpose in stressing the importance of independent and meaningful activity.

He has attempted to clarify the issue concerning transfer of training, an issue as old as educational speculation, by submitting the thesis that transfer is just another name for intelligence. It is significant that some recent experiments reveal that the amount of transfer, other things equal, is greater for those of high intelligence quotients than for other groups.

Bode notes that the strong tendency to-day, both in behaviorism and in the psychology associated with Thorndike's name, is to converge on habit formation. He believes that this tendency has led to a neglect of due analysis of the function of foresight or intelligence in human behavior. In practice, this *prediction for the*

category of habit encourages teachers to stress rote learning and curriculum-makers to select and organize materials for the purpose of automatization. He holds that habit formation, in Thorndike's sense is relatively unimportant, and that the cultivation of thinking as a creative process (really the reconstruction of old habits) is of fundamental importance. At bottom, according to Bode, the explanation of the habit trend is the desire to fight shy of everything that cannot be handled by some form of scientific technique.

Charles H. Judd.—As university professor, writer, and experimenter, Judd has contributed much to educational psychology. Especially significant are the carefully controlled studies, published with those of his colleagues Gray and Freeman in the *Supplementary Educational Monographs of the University of Chicago*. In these, Judd has made for a better understanding of the specific application of the laws of learning to school subjects. In the fields of reading and handwriting especially, he has experimentally established the nature of the processes involved.

Judd's explanation of the conditions under which transfer of training occurs resembles rather closely that of Bagley and Bode, and is essentially different from that of Thorndike. His position is that transfer depends not on the presence of *identical elements* in the practised and other situations, but on the extent to which the learner generalizes his experience. The vital factor with Judd is conceptual activity.

John B. Watson.—Watson is the chief American representative of the movement in psychology called behaviorism. In its early development (e.g., in his article on *Psychology as a Behaviorist Views It*) this movement consisted in a renunciation of a method long asso-

ciated with the study of psychological facts, the method of introspection. It would confine psychology to facts and conclusions entirely discoverable by the other traditional method, the method of objective observation. This was urged as desirable on the ground that it included only verifiable, and hence scientific, data. It should be noted that Watson's position here involved an attack on a *method* of studying human activity and concomitantly a narrowing of the *content* of psychology. But it did not involve any explicit rejection of consciousness.

However, the next step was taken in Watson's *Behaviorism*, and in *The Ways of Behaviorism*. This step consisted in challenging the older psychology to prove the existence of consciousness, and in the positive thesis that all human behavior can be explained mechanically; i.e., in terms of the same forces which operate in non-conscious nature. This distinction between behaviorism as a method and behaviorism as a philosophy has not been clear to many who use the term. In moving to this second position, Watson has definitively rejected the dualism of mind and body which has perennially troubled psychology. Since the beginning of physiological psychology, the existence of two sets of facts (physiological and mental) was taken for granted. It was either assumed that both mind and body functioned simultaneously but without causal relation (theory of parallelism), or that each acted on the other (theory of interaction). The full behavioristic doctrine is no longer troubled by the dualism. It tries to explain mind by explaining it away. Thinking, for example, is not a conscious activity; it is sub-vocal speech.

Watson's theory of education, as developed in his recent *Psychological Care of Infant and Child*, makes original nature of slight importance, and makes en-

vironmental influences the supreme factor. Instincts, which are considered so important by James, Hall, Thorndike and practically all recent psychologists, are denied. Only the physiological structures and a few *elementary movements* (unconditioned reflexes) are present at birth. Education consists in building up *conditioned* reflexes, i.e., responses to new situations. This is accomplished by tying up these situations to those which produce unconditioned reflexes. For instance, if we wish a child to fear something, we tie that something up to a situation which unconditionally arouses fear. The significant point in this educational theory is its complete antithesis to that of the hereditarians who minimize the effect of environment on growth.

Watson teaches that the conditioning of emotions is even more important than the conditioning of so-called *intellectual* reactions. It is interesting that this same emphasis on emotions is conspicuous among the psychoanalysts (Freud, Jung, etc.). But there the resemblance ceases. With Watson, it is not the *repressions* of emotions which cause maladjustments (complexes) in later life, but the conditioning of these emotions early in life in ways that produce maladjustment later. For example, it is not any *subconscious need* for the mother which causes many married women to be unhappy; it is their early conditioning as children to dependence on the mother, from which feeling of dependence they cannot later escape.

It is too early to forecast what the practical effect of behaviorism will be on education. One critic points out that the shift from stressing the educational importance of instincts to denying their existence constitutes a return to John Locke and Herbart. Except for the few *elementary movements present at birth*, the child is a

tabula rasa. This makes the teacher all-important. He is to build, not apperceptive masses perhaps, but conditioned reflexes. The conception of the child as a source of initiative and creative activity (Rousseau, Froebel, and the line of succession from them) gives place in behaviorism to the conception of the child as *so much raw material awaiting the manipulation of the teacher*.

REFERENCES

(Chapter IV)

In addition to the titles mentioned in the body of the text, the following readings are recommended:

Bagley, W. C.—*Determinism in Education* (1925).

Bode, Boyd H.—*Modern Educational Theories*, (1927)
Chapter VII (Project Method).

Kandel, I. L. (Editor)—*Educational Yearbooks, International Institute of Teachers College, Columbia University*, 1924 (Chapter on Education in the United States, Chapter on Problem of Method in the United States), 1925 (Chapter on Education in the United States, Chapter on Problem of Elementary School Curriculum in the United States), 1926 (Chapter on Education in the United States, Chapter on Problems of Secondary Education in the United States), 1927 (Chapter on Education in the United States, Chapter on Problem of Teacher Training in the United States).

Kandel, I. L. (Editor)—*Twenty-five Years of American Education*, pp. 102-103 (Hall), pp. 104-105 (James), pp. 105-111 (Thorndike), Chapter V (Tests and Measurements), pp. 154-158 (Dewey), pp. 165-176 (Project).

Knight, E. W.—*Education in the United States*, pp. 521-524 (Dewey), pp. 528-533 (Thorndike), Chapter XVII (Tendencies and Problems), Chapter I (Present Conditions).

Parkhurst, Helen—*Education on the Dalton Plan*. (1922).

Twenty-seventh Yearbook, National Society for the Study of Education (Controversy of Hereditarians and Environmentalists).

NEW TYPE QUESTIONS

TRUE-FALSE. POST-WAR DEVELOPMENTS

State whether each of the following statements is true or false:

1. France has strengthened the requirements for teachers in private elementary schools, so that today they are the same as those for teachers in public elementary schools.

2. France restricts members of teaching congregations more than does the United States.

3. The movement for a common basic school for all in France has not advanced as far as in some of the German states.

4. On the whole, there have been no revolutionary changes in French elementary education since the War.

5. The radical French continuation school bill of 1917 has not fructified.

6. The French lycée has been greatly democratized since the War by the policy of working toward abolition of fees by 1936.

7. The protagonists of the classics in France have been steadily gaining ground in the secondary schools since 1924.

8. Within the last ten years, girls' lycées in France have been sending more students to the universities than formerly.

9. Affiliation of elementary school teacher preparation with the universities has progressed farther in the German states than in France.

10. As in America, the post-War tendency in France is to increase the attention to liberal studies in the normal schools for elementary teachers.

11. France has done nothing since the War to lessen the disparity between the requirements for teaching posts in boys' and girls' lycées.

12. Teachers in French secondary schools devote much time during their preparation to pedagogical courses.

13. The tendency in French elementary schools has been in the direction of stressing scientific gymnastics rather than a sports program.

14. Professors in the national French universities are appointed by the national Minister of Public Instruction.

15. It has been proposed in France that the secondary school course be extended so that students may be more mature upon entrance to the university.

16. The German Constitution of 1919 gave the government certain educational powers, which it has used extensively.

17. Since the War, German education has become as uniform as that of France.

18. The national government of Germany has repealed its 1920 law abolishing the private *Vorschulen*.

19. Republican Germany has resisted attempts to split the elementary schools along denominational lines.

20. Unlike the United States, the kindergarten in Germany is essentially a private enterprise.

21. The Froebelian conception of pre-primary method is more widely accepted in Germany than that of Montessori.

22. The post-War *Arbeitsschule* in Germany is a vocational school.

23. German educational leaders make less use of intelligence tests and of homogeneous grouping than Americans.

24. Increasing participation of parents in school matters in Germany has been partly due to the lessening of official prescription.

25. The **middle schools** have been steadily declining in post-War Germany.

26. The Deutsche Oberschule makes a sharp break from the older theory of German secondary education which gave foreign languages a conspicuous place.

27. The new Aufbauschule in Germany aims to widen educational opportunity for children of the lower social classes.

28. Due to economic difficulties, Germany has greatly increased the proportion of the cost of secondary education falling upon parents.

29. Separate normal schools (Lehrerseminaren) for elementary school teachers have disappeared in the great majority of German states.

30. Post-War changes in most of the German states have postponed the age at which training for the profession of elementary school teaching begins.

31. As in progressive American states, elementary school teachers in German states must have based their professional training on at least a secondary school course.

32. Under governments of the Left, the provision for a common basic education (Grundschule) and for greater centralization of school management thrives in the German states.

33. Only one German state (Saxony) has yet required prospective secondary teachers to study pedagogy before assignment as teachers to secondary schools.

34. In America, there is much more insistence on the

study of pedagogical subjects by prospective secondary teachers than in either France or Germany.

35. A strong university group in Germany opposes the post-War movement to train teachers in the university on the ground that the university exists primarily for scientific research.

36. The growth of Aufbauschulen has been one factor causing increase in the number of students enrolled in German universities.

37. The Fisher Act in England deprived denominational schools of national and local support, thus giving England a unitary system of schools.

38. Since the War, the dual system of schools in England has been swept away.

39. There has been a stubborn opposition in England against using public money for the education of children under five.

40. Most of the nursery schools in England are in London.

41. The compulsory part-time provision of the Fisher Act in England has been rigorously enforced.

42. England is more interested in special methods than in generalized method proposals like the project.

43. The English secondary school system is approaching that of France in uniformity among schools.

44. In England, the post-War emphasis has been on increasing the number of free places in private secondary schools rather than on increasing the number of free local secondary schools.

45. The exclusive public schools in England are encountering difficulty in attracting students and hence are applying for government grants.

46. English educational leaders believe that the prospective elementary teacher should have extensive ap-

prentice teaching experience before admission to the training college.

47. The English Board of Education has since the War given training college authorities greater leeway than before the War in the organization of teacher training courses.

48. In recent years, the English Board of Education has been offering grant-supported training for secondary school teachers to be taken at the universities.

49. A student in England who receives university preparation for secondary school teaching at state expense must pledge himself to teach in an **approved** (grant-earning) school.

50. Leading advocates of higher education for women in England are demanding separate universities for women rather than more women's colleges at existing universities.

MATCHING TEST. POST-WAR DEVELOPMENTS

Place the number which is at the left of Column A before the item in Column B which you most closely associate with it.

A	B
1. École unique	Fight for free lycées
2. Arbeitsschule	Extension of full-time secondary education
3. Hadow Report	Increasing place of testing in education
4. Herriot	Only faculty of theology
5. Grundschule	Opposition to the policy of increasing free places in private secondary schools

- | | |
|--|---|
| 6. Oxford and Cambridge | Education of the Adolescent |
| 7. L'amalgame | Common basic school |
| 8. Consultative Committee Report of 1924 | Compulsory part-time schooling |
| 9. Deutsche Oberschule | Facilitation of transfer from elementary to secondary education |
| 10. Gesamtunterricht | Child growth through activity as the basis of education |
| 11. Dual System | Sparing use of intelligence tests |
| 12. Agrégation | Fight for compulsory Latin and Greek |
| 13. Psychology of the whole | Proposed part-time school to twenty for boys and eighteen for girls |
| 14. Fisher Act | Competitive examination for lycée posts |
| 15. Continuation school bill of 1917 | Sought national grants in 1923 |
| 16. Bérard | Substitute for private Vor-schule |
| 17. British Labour Party | Secondary education with German culture as a core |
| 18. Aufbauschule | Combining classical and modern sections under the same teachers |
| 19. Strasbourg | Well-correlated activities curriculum |
| 20. Local secondary schools | Provided and non-provided schools |

TRUE-FALSE QUESTIONS. AMERICAN EDUCATION

State whether each of the following statements is true or false:

1. The United States Office of Education has no power to administer education anywhere on the continent of North America.

2. The Smith Hughes Act of 1917 is concerned chiefly with vocational education below the college level.

3. Schools in the Philippines and Porto Rico are administered by the War Department; the proposed new federal department aims to bring such educational work under one strictly educational agency.

4. It is probable that the future trend in the United States will be to increase the number of state school officers elected by the people.

5. Equalization of educational opportunity is hampered by wide differences in the per capita expenditures on education in the various states.

6. Elementary and secondary education is predominantly public in the United States, higher education predominantly private.

7. The trend in the United States is in the direction of increased public provision of kindergarten education. However, relatively, private kindergartens are increasing more rapidly than public kindergartens.

8. The junior high school has shifted its purpose from the earlier one of increasing the amount of secondary education to providing a different kind of secondary education.

9. The prevailing tendency in junior high school organization is toward the 6-3-3 plan.

10. The curriculum tendency in junior high school evolution is toward earlier introduction of intensive courses.

11. The main purpose of the junior high school is vocational preparation.

12. Junior colleges show, on the whole, less radical reorganization of the curriculum than junior high schools.

13. Higher education in the United States, like elementary and secondary education, is essentially a public enterprise.

14. Honors courses in American colleges aim to develop capacity for self-direction of study in capable students.

15. The immediate effect of the World War on teacher certification in the United States was to raise the standards required for appointment.

16. The chief source for the training of secondary school teachers in the United States is the state and endowed liberal arts colleges rather than the normal schools.

17. The trend in three and four-year normal schools is in the direction of adding so-called liberal subjects to their curricula.

18. The Federal government has made no legislative attempt since the War to limit child labor.

19. States with mandatory continuation school legislation require part-time attendance in all communities within the state.

20. There are three chief interpretations of the term **project method**.

21. Much energy is today being expended to organize school experience so that it will strike a proper balance between social participation in learnings and due recognition of individual differences.

22. Both the Dalton and Winnetka plans provide for some common group participation in school experience.

23. The Dalton Plan permits a child to undertake the

work of a second month in some subjects before he has completed the work of the first month in all subjects.

24. The graded classroom organization is retained to a greater extent in the Winnetka than in the Dalton plan.

25. The essential feature of the so-called Gary Plan is the utilization of the whole school plant for a greater proportion of time than is customary in the traditional organization.

26. The work of the Gary Plan curriculum is intended to achieve non-vocational objectives.

27. The group intelligence test movement came later than the individual intelligence test movement.

28. Intelligence tests have been developed to the point where they are recommended by responsible leaders as dependable single measures for the classification of learners.

29. The hypothesis that the I.Q. is constant has been somewhat weakened by studies of the effect of environment on foster-children.

30. Stone published the first standardized achievement measuring instrument.

31. Achievement measuring instruments are being used today for diagnostic more than for survey purposes.

TRUE-FALSE QUESTIONS. CONTEMPORARY EDUCATIONAL LEADERS

State whether each of the following statements is true or false:

32. Dewey's educational philosophy has insisted upon the mutual exclusiveness of interest and effort in learning.

33. Dewey's analysis of an act of reflective thinking has been a factor in the movement for problem teaching.

34. The earlier vogue of the Herbartian **formal steps** has been greatly strengthened by Dewey's endorsement.

35. Dewey stresses the doctrine that the school is life and not merely a preparation for it.

36. Thorndike's contribution, like Dewey's, has been chiefly in the field of educational philosophy.

37. Of the three laws of learning associated with his name, Thorndike regards the law of effect as most fundamental.

38. Like Watson, Thorndike holds that unlearned tendencies are few and unimportant.

39. Thorndike was one of the pioneers in this country in the application of statistical methods to the study of educational problems.

40. Thorndike's handwriting scale was the first standardized quality measurement instrument ever constructed.

41. Thorndike's studies of adult learning have demonstrated that learning capacity is greater between 20 and 30 years of age than before or after.

42. Terman has limited his work in measurement to the field of intelligence tests.

43. The Stanford Achievement Test is a battery of group intelligence tests.

44. The book called **Hygiene of the School Child** was written by the chief author of the Stanford Revision of the Binet-Simon tests.

45. Careful genetic studies of geniuses have been made in recent years by Terman and his associates.

46. Terman's studies of geniuses indicate that there is a negative correlation between very high I.Q. and physical well-being.

47. Bagley, like Terman, holds that environmental factors are more potent in development than innate ability (native intelligence).

48. Bagley has been a leading critic of the assumptions on which the project philosophy of education rests.

49. James, in the last decade of the nineteenth century, stressed habit formation as the chief means of education.

50. Most recent psychology has continued to insist, with James, that emotions are essentially visceral and physiological in nature.

51. Hall was one of the leaders of the child study movement in the decade before the World War.

52. Most modern psychologists have rejected Hall's theory of recapitulation.

53. Bode has insisted that the determination of educational purposes is the function of educational philosophy, rather than of educational sociology.

54. Bode and Bagley are among the leading critics of the project method under all three of its connotations.

55. Kilpatrick is a leading exponent of the validity of the project method.

56. Thorndike holds that transfer of training is dependent on identical elements; Judd, that it is dependent on the extent to which the learner generalizes his experience.

57. Bode opposes Thorndike's stress on habit formation as the central fact in learning.

58. Judd has been an important contributor to our understanding of the nature of the processes involved in reading and handwriting.

59. Watson is a leader of the behavioristic movement in psychology.

60. The essential feature in present-day behaviorism

is its rejection of introspection as a valid method of securing an understanding of human activities.

61. Watson conceives the process of education as one of conditioning a small number of unconditioned reflexes.

62. Watson, like Terman, stresses the relative strength of environment over heredity in education.

63. Watson resembles the psychoanalysts in his emphasis on early emotional experiences as determinative of later behavior.

64. In Watson's behaviorism, the teacher is of slight importance in the educative process.

MATCHING TEST. RECENT AMERICAN TRENDS

Place the number which is at the left of Column A before the item in Column B which you most closely associate with it:

A	B
1. Smith-Hughes Act	Charters
2. Beginning of continuation school legislation	Federal Secretary of Education
3. Winnetka Plan	McMurry
4. Oregon School Law	Work-study-play
5. Foundations of method	Wisconsin
6. Determinism in Education	Federal Board for Vocational Education
7. Smith-Towner Bill	Dewey
8. Educational Psychology	Bode
9. Gary Plan	Contracts
10. Projects as central teaching units	Thorndike

88 RECENT TRENDS IN EDUCATION

- | | |
|--|---|
| 11. How We Think | Bagley |
| 12. Personality measurement | Kilpatrick |
| 13. Conflicting Psychologies of Learning | Attendance to be at public schools only |
| 14. Adolescence | Terman |
| 15. Last compulsory attendance statute | Washburne |
| 16. Dalton Plan | Downey |
| 17. Talks to Teachers | Watson |
| 18. Project as an act carried to completion in its natural setting | Mississippi |
| 19. Measurement of Intelligence | Hall |
| 20. Psychological Care of Infant and Child | James |

INDEX

A

agrégation, 8, 9
 Allport test, 60
 amalgame (1'), 6
 approved school, 35
 Arbeitsschule, 15, 16, 18
 Aufbauschule, 20, 23, 25

B

Bagley, 48, 51, 52, 60, 66, 69, 71
 Balfour Act, 26, 31
 behaviorism, 71, 72
 Bérard, 5
 Berlin, University of, 24, 25
 Binet, 59, 65
 Bismarck, 18
 Blow, Susan, 42
 Bode, 52, 53, 60, 69-71
 brevet élémentaire, 2, 3
 brevet supérieur, 2, 5

C

Carter, 46
 catharsis, 67, 68
 Cattell, 59
 certificat d'études élémentaires, 3
 Charters, 51
 Christian Brothers, 53
 collège, 1, 2, 4, 5, 6, 8
 Comenius, 17
 Consultative Committee Report
 of 1924, 30; of 1927, 29
 cours complémentaires, 7

D

Dalton Plan, 29, 54-56
 determinism in education, 66
 Deutsche Oberschule, 20, 23
 Deutsche Studentenschaft, 13
 Dewey, 15, 54, 58, 62-63, 70
 Downey Test, 59

E

école maternelle, 7, 43
 école primaire élémentaire, 7
 école unique, 2, 7
 Einheitsschule, 11
 Elternbeiräte, 18

F

Federal Board for Vocational
 Education, 39
 Fisher Act, 21, 26, 29, 31
 Forster Act, 26
 Freud, 73
 Froebel, 14, 15, 54, 74

G

Galton, 59
 Gary Plan, 57-59
 Gesamtunterricht, 16, 29
 Gestalt, 17
 Goddard, 59
 grant-earning schools, 31
 Grundschule, 12, 15, 16, 19, 20, 22
 Gymnasium, 19, 20

H

Hadow Report, 29, 31
 Hall, G. S., 68, 73
 Harris, W. T., 42
 Herbart, 15, 16, 63, 67, 68, 73
 hereditarians, 60
 Herriot, 4
 Hilfsschulen, 17
 honors courses, 46

J

James, W., 67-68, 73
 Judd, 71
 Jung, 73
 junior college, 44-45
 junior high school, 43-44

K

Kilpatrick, 51, 53, 63, 70
Kuhlmann, 59

L

Lehrerseminaren, 22
licence, 8
local secondary schools, 30, 31, 32
Loi Guizot, 6
lycée, 1, 4, 5, 6, 8, 9

M

maintenance grants, 21
Mann, 46
manuscript writing, 30
McMurry, C. A., 52, 70
Mittelschule, 18
monitorial societies, 32
Montessori, 14, 15
Morrill Act, 38, 47

N

non-provided schools, 26, 27, 28
nursery schools, 28

O

Oberrealschule, 19
Office (Bureau) of Education, 38, 39
opportunism in education, 66
Oregon Case, 41-42

P

Pearson, 59
Pestalozzi, 15, 17, 22
post-primary education, 31, 32

project, 29, 50-53
provided schools, 26, 28
public schools (England), 31, 32

R

Realgymnasium, 19, 20
recapitulation, theory of, 68
Rousseau, 74

S

Smith-Hughes Act, 38, 50
Smith-Towner Bill, 39
Snedden, 70
Stone, 61
Strasbourg University, 9, 10

T

Technische Hochschule, 22, 25
Terman, 59, 65-66
Thorndike, 59, 61, 63-65, 70, 71, 73
training colleges (England), 33, 34

V

Voelker Test, 59
Volksschule, 11
Vorschule, 12, 19, 20

W

Watson, J. B., 71-74
Winnetka Plan, 55-57

Y 213

Youth Movement (Germany), 16

UNIVERSITY OF CALIFORNIA LIBRARY
BERKELEY

Return to desk from which borrowed.
This book is DUE on the last date stamped below.

20 Sep 51 AL

7 May 52 LU

9 Nov 53 LD

OCT 28 1953 LU

15 MAR 60 FG

REC'D LD

MAR 7 1960

2 JAN '64 BG

REC'D LD

JAN 31 '64-8 AM

LD 21-95m-11,'50 (2877s16)476

Y.B 63998

862394

LA
14
C8

THE UNIVERSITY OF CALIFORNIA LIBRARY

